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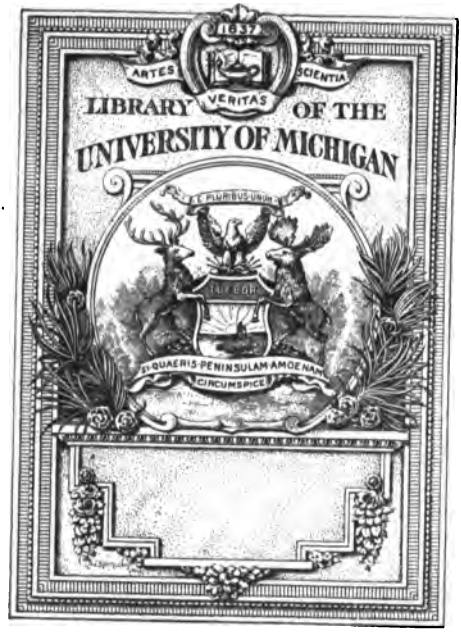
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MINUTES

OF THE

OHIO STATE MEDICAL SOCIETY

HELD

IN THE CITY OF CLEVELAND, JUNE, 1852.

WITH

ADDRESSES AND ESSAYS.

CLEVELAND:
HARRIS & FAIRBANKS, PRINTERS, HERALD BUILDING.

1853.

Not

MINUTES.

OF THE

OHIO STATE MEDICAL SOCIETY.

HELD IN THE CITY OF CLEVELAND, JUNE, 1852.

CLEVELAND, OHIO, JUNE 1st. 1852.

Society met in the Cleveland Medical College. The President, Dr. BŒRSTLER, being absent, Prof. KIRTLAND, Vice President, took the Chair and called the Society to order.

The Secretaries being absent, Drs. HILLS and KREIDER, were appointed Secretaries *pro tem.*

Dr. RICKEY moved, that a committee of five be appointed to nominate officers for the ensuing year, and that Dr. TOM O. EDWARDS be Chairman thereof.

Dr. J. B. THOMPSON moved to amend by inserting "Should be no election on the first ballot, then the three highest candidates only to be balloted for."

Dr. MCLEAN moved to so amend as to proceed to the election officers by nomination and ballot. Carried.

Dr. CRUME moved to suspend the election of officers in order to give the Committee on Admission, time to report. Carried.

Drs. R. THOMPSON and E. CARNEY, being the only members of said committee present, Drs. W. JUDKINS, WOODWARD and Prof. St. JOHN, were added.

The Committee reported for membership the following named applicants, who were duly elected.

Dr. BENJ. STAUNTON,	Dr. M. L. HEWITT,	Dr. A. CAREY,
" WM. ESTEP,	" B. TAPPAN, Jr.	" G. S. METZGER,
" L. COLLINS,	" C. E. AMES,	" B. SHELDON,
" R. STORY,	" R. C. HOPKINS,	" E. M. HOWARD,
" J. PRICE,	" L. D. GRISWOLD,	" JOSEPH COLE,
" E. STERLING,	" E. FISHER,	" A. R. MCDONALD,
" P. A. GORDON,	" A. L. DILLE,	" E. ANGEL,
" T. STERLING,	" M. L. WRIGHT,	" J. LANG CASSELS,
" H. FASSETT,	" W. UNDERWOOD,	" E. KELLY,
" G. P. ASHMUN,	" H. G. CAREY.	" M. L. BROOKS,
" J. S. NEWBERRY,	" T. G. CLEVELAND,	" H. F. HUBBARD,
" J. A. SAYLES,	" F. BROOKS,	

It having been ascertained that Professsors ST. JOHN, TOM O. EDWARDS, and A. H. BAKER, had not been credited with their initiation fee,

On motion of Dr. McLean,

Resolved, That the fact of payment of their initiation fee be entered upon the records of this Society. Carried.

The Society then proceeded to the election of officers, which resulted as follows:

President.—Prof. H. A. Ackley.

Vice Presidents.—Drs. A. I. Bennett, H. S. Conklin, Friend Cook, and Benj. Staunton.

Secretaries.—R. G. McLean and H. G. Carey.

Treasurer and Librarian.—W. W. Rickey.

On motion, Society took a recess until 2 o'clock, P. M.

Afternoon Session.

Society met at 2 o'clock. President in the Chair,

When Prof. St. John, Drs. Murphy, J. B. Thompson, Kuhns, and M. Z. Kreider, were elected committee on admissions.

R. Hills,
M. Z. Kreider,
Secretaries pro tem.

The Committee on Admission then reported for membership Drs. H. O. Mack, J. J. Conlan, W. H. Doloman, J. A. Knowlton, Wm. Smith, Jacob Crabb, J. N. Green, N. B. Marsh, Addin D. Bigelow, B. Woods, I. N. Wilson, and L. Firestone. Elected.

On motion of Dr. A. I. Bennett,

Resolved, That Sec. 5 of Art. 4 of the By-Laws of this Society shall be construed to mean, in accordance with the usage of the U. S. Senate.

Dr. J. B. Thompson, Treasurer, then made the following report:

J. B. Thompson, Treas., in acc't with the O. S. M. Society, Dr.

To amount from Treas. O. M. Convention,		$38 67
" " " late Treas. O. S. M. S.,		77 90
" " " Dr. Trevitt, Sec'y.,		120 00
		$236 57

Contra. Cr.

By Cash for Stationery,		45
" Paid Scott & Bascomb, voucher,	A.	18 00
" S. Medary, "	B.	3 75
" Willmer & Mock, "	C.	5 00
" R. L. Howard, "	D.	2 00
" J. H. Felch, "	E.	8 25
Paid S. Medary in part for publishing proceedings,		195 75
		233 20
Balance in Treasury,		3 37
Balance due Medary for publishing proceedings,	38 25	
Liabilities beyond means in the Treasury,	34 87	

All of which is respectfully submitted.

June 1, 1852. J. B. Thompson, *Treasurer.*

Referred to Committee on Finance, which reported it back as follows:

The Committee on Finance, to whom was referred the above, have examined the same and find it correct, and recommend that an order be drawn on the Treasurer in favor of S. Medary for the balance due him: and further, recommend that the committee on publication be required to invite competition for the printing, and contract for it on as reasonable terms as will secure its faithful execution.

Signed, M. Z. KREIDER, JNO. MORRISON, } *Committee.*

On motion of Dr. KREIDER,

Resolved, That the report on the Medical Literature of Ohio, by Dr. R. THOMPSON, printed with the proceedings of the Society at its last meeting, be now taken up, and referred to a committee of five, two of whom to be appointed by Dr. R. THOMPSON, two by Dr. AWL, and one by the President of the Society.

Dr. MURPHY sent to the Chair a Circular from Dr. MENDENHALL, of Cincinnati, in regard to epidemic diseases of Ohio, Indiana and Michigan, which was read, and, together with a resolution on the subject by Dr. MURPHY, ordered to be laid on the table.—(See Appendix, Doc. A., 1852.)

Dr. KREIDER then presented the valedictory address of Dr. BŒRSTLER, which was ordered to be read by Dr. KREIDER, and made the order of the day for to-morrow, 9 A. M.—(See Appendix B.)

Referred to Committee on publication, and ordered to be printed.

Dr. MUZZEY, at the request of the Society, then gave a concise history of proceedings of the American Medical Association, at its late session in Richmond, Virginia.

On motion of Dr. Maris, the reports of standing committees were made the order of the day for to-morrow.

On motion of Prof. HOWARD,

Resolved, That the Society order that all members having papers to be read at the present session, place them by title on file with the Secretaries.

Dr. P. J. BUCKNER, from the Select Committee to whom was referred sundry resolutions of the last session on the subject of primary and medical education, made a report which was discussed by Professors BAKER and ACKLEY and Dr. MURPHY. Prof. R. L. HOWARD having the floor for to-morrow at 8 A. M., the Society adjourned until that hour. (See Appendix C.)

H. A. ACKLEY, *President.*

R. G. MCLEAN, H. G. CAREY, } *Secretaries.*

MORNING SESSION, June 2, 8 o'clock, A. M.

Society met. Vice President B. STAUNTON in the Chair.

Journal of yesterday's proceedings read and approved.

Dr. W. W. Rickey then read a letter from Dr. M. J. Bailey, Special Examiner of Drugs in the United States' Custom House, New York, in response to resolutions of last annual session; laid on the table.

Dr. Schurtzer here presented an apparatus for adjusting fractures of the clavicle.

Prof. Howard having the floor, resumed his remarks upon the report of Dr. Buckner, and was followed by Prof. Edwards, Dr. Buckner, Professors Baker, Kirtland, Muzzey and Smith, and Drs. Murphy, McLean and R. Thompson; when, on motion of Dr. Tappan, the report was re-committed, with instructions to strike out the word Geometry, and insert, "a sufficient knowledge of the Latin language;" and to report the names of two Censors from each auxiliary society.

The Committee on Admissions then reported the following persons for membership:—

Drs. T. B. Johnson,	Drs. A. S. Wilson,
" L. Haldeman,	" H. Selden,
" S. F. Buckner,	" J. Ingram,
" N. R. McKenzie,	" J. D. Cotton,
" C. Broadleck,	" J. A. McFarland,
" J. Hammond,	" G. W. Roby,
" C. N. Lyman,	" Jas. Bronson,
" V. Smith.	" Thos. Rodman,
" I. Barkley,	" A. C. Smith,
" A. Metz,	" F. Irish,
" H. C. Moore.	" J. Moore.

On motion of Dr. W. W. Rickey, Dr. M. J. Bailey, of New York, was elected an honorary member of this Society.

Society then took a recess until 2 o'clock, P. M.

Afternoon Session.

Society met. First Vice President, A. I. Bennett, in the Chair.

Dr. Wm. Judkins, from Committee on Epidemics, presented a report.—(See Appendix A.)

Dr. Buckner, Chairman Medical Society, reported for admission as auxiliaries, Hamilton County Medical Society, and Stark County Medical Society. Adopted.

An invitation was then read from the Montgomery County Medical Society, urging this Society to hold its annual meeting for 1853 in the city of Dayton; when, on motion of Prof. S. M. Smith, it was

Resolved, That when this Society adjourn, it adjourn to meet in the city of Dayton, on the first Tuesday of June, A. D. 1853. (Carried under the previous question.)

The Committee on Medical Societies, reported for admission, as an auxiliary, the Clark County Medical Society. Adopted.

D. Buckner, Chairman of the Committee on Primary Education,

to whom was re-committed the report, reported the same back; which, after some modification by the Society, was adopted, and ordered to be printed.

On motion it was

Resolved, That Medical and Literary Journals of the State be requested to publish this report.

Prof. Tom O. Edwards, Chairman of Committee appointed at last session, made a verbal report on a substitute for S. Quinine. His experience with Bebeerine had been unsatisfactory. It had failed as a general matter; so with Strychnine. Prof. Kirtland had succeeded well with Strychnine.—(See Appendix D.)

The Committee on Obituary then submitted their report.—(See Appendix E.)

Prof. Edwards then read an interesting paper on the treatment of cholera with Strychnine; also an abstract of cases of ship fever by warm bath and enemata of cold water.—(See Appendices F. & G.)

Dr. M. Z. Kreider, Chairman of Committee to whom was referred the report of Dr. R. Thompson on the Medical Literature of Ohio, of last session, reported, That after mature deliberation, the Committee is satisfied that Dr. Thompson is in error in attributing the origin of the O. M. Convention to Prof. Drake; but inasmuch as Dr. T. wishes time to get the testimony of Dr. Reed, of Missouri, the Committee ask further time for a final report. Adopted.

On motion of Dr. Buckner,

Resolved, That after mutual statements by Drs. Awl and Thompson in regard to history of Medical Literature of Ohio, it is the opinion of this Society that Dr. Wm. M. Awl was the originator of the Ohio Medical Convention, and that Dr. R. Thompson was led into error by information since ascertained to be incorrect, and that no blame attaches to Dr. T. for said error: which, after an animated debate, in which Drs. Awl, R. Thompson, Jones, Buckner, and Professors Kirtland and Smith participated, was adopted.

Dr. Buckner then submitted a preamble and resolutions, reporting Dr. Hendren, of Delaware, for a breach of Ethics of this Society. Referred to Committee on Ethics.

The Chair then announced the following Standing and Special Committees:

STANDING COMMITTEES.

Executive.—R. L. Howard, J. B. Thompson, G. W. Morris, S. P. Hunt.

Finance.—M. L. Brooks, W. W. Rickey, R. Thompson, F. S. Hurxthall, E. Carney.

Publication.—W. W. Rickey, J. B. Thompson, T. G. Cleveland, R. G. McLean, H. G. Carey.

Ethics.—Wm. M. Awl, F. T. Hurxthall, S. M. Smith, M. L. Hewitt, E. K. Chamberlain.

Medical Societies.—J. L. VATTIER, J. P. HENDERSON, WM. BUSHNELL, VESPASIAN SMITH, J. B. POTTER.

SPECIAL COMMITTEES.

Surgery.—E. STERLING, M. Z. KREIDER, J. P. JUDKINS.

Practical Medicine.—J. A. MURPHY, GEO. E. EELS, S. M. SMITH.

Obstetrics.—F. CARTER, E. GASTON, E. ANGEL.

Medical Literature.—J. S. NEWBERRY, S. ST. JOHN, BENJAMIN TAPPAN, JR. Society adjourned till 8 A. M. to-morrow.

A. I. BENNETT, *President.*

R. G. McLEAN, C. H. CAREY, } *Secretaries.*

THURSDAY, June 5th, 1852.

Society met pursuant to adjournment—Dr. A. I. BENNETT, 1st Vice President, in the Chair.

Reading of Journal commenced.

On motion, minutes of yesterday's proceedings were ordered to be referred to a Committee for correction and revisal.

Referred to Prof. ST. JOHN, Drs. NEWBERRY and BUCKNER.

Dr. KREIDER then submitted an account for putting up minutes.

Referred to Committee on Finance, and ordered to be paid.

Dr. KREIDER then proceeded to read the Valedictory Address of Dr. BŒRSTLER. (See Appendix.)

Referred to the Committee on Publication, and ordered to be printed.

On Motion of Dr. DAWSON,

Resolved, That the members of this Society report to the Committee on Ethics any member of this Society who is in the habit of consulting with irregular practitioners of medicine of any kind; also those interested in the sale of nostrums.

The Committee on admissions reported the name of Solomon Stewart for membership; elected.

Dr. CONKLIN presented the application of the Shelby County Medical Society as an auxiliary. Referred to Com. on Med. Soc.

Dr. BUCKNER, Chairman of said Committee, reported the same back, recommending its admission; adopted.

On Motion of Dr. J. A. COONS,

Resolved, That each County Medical Society be requested to appoint a Committee for the purpose of taking the Medical Census of their respective Counties, noting the whole number of Physicians, the number of Graduates of Regular Schools, number of Females practising, &c., and report to the Secretary of this Society at an early day.

Dr. LEWIS of New Haven, Huron County, Ohio, gave verbally a history of a fatal epidemic, which prevailed in New Haven and vicinity, in the fall of 1851 and Spring of 1852.

The Committee on admissions reported the name of J. J. DELAMATER of Cleveland, for membership. Elected.

An invitation from M. L. HEWITT, M. D., Physician and Surgeon to the United States Marine Hospital, was received, inviting the Society to visit the U. S. M. Hospital.

On motion, the thanks of the Society were voted to Dr. HEWITT for said invitation.

On motion of Dr. HOWARD, of Akron,

Resolved, That we will visit the United States Marine Hospital at 2 P. M.

Dr. J. S. NEWBERRY then read an able and interesting paper on the specific identity of Typhoid and Typhus fevers.—(See Appendix H.)

On motion of Prof. S. M. SMITH, it was referred to Committee on Publication—(See Appendix H.)

The merits of the paper was then ably discussed by Profs. SMITH, KIRTLAND, J. DELAMATER, and Drs. HILLS, LEWIS, COLE and A. CAREY.

Dr. JUDKINS from the Committee on Obstetrics, read an able and interesting report, which upon motion, was referred to Committee on Publication, and ordered to be printed with the proceedings.—(See Appendix I.)

Committee on admission reported for membership, Drs. D. D. CAMERON, C. P. ALLEN and DANIEL SCHROEDER. Elected.

On motion of Dr. MCLEAN the letter of Dr. MENDENHALL, together with the resolutions of Dr. MURPHY, was taken from the table and ordered to be entered with the proceedings for publication.—(See Doc. No. 1. A. 1852.)

On motion,

Resolved, That the Society exceedingly regrets that so many members have left before the close of the session, and earnestly request that hereafter every member will feel that he owes it to his profession to remain until the close.

Dr. STERLING read a valuable paper on the comparative merits of Lithotomy and Lithotrity. (See Appendix J.)

On motion of Dr. RICKEY,

Resolved, That the thanks of this Society are hereby tendered the Faculty of the Cleveland Medical College, for their courtesy in furnishing it the use of their College during this Session.

The Committee to whom was referred the minutes of Wednesday, with instructions to correct errors, beg leave to report, that in the absence of the second Secretary they are unable to perform that duty satisfactorily, and would suggest that they be referred to Dr. R. G. MCLEAN, the first Secretary. Signed

P. J. BUCKNER,
J. S. NEWBERRY. } *Committee.*

Report adopted.

On motion of Dr. BUCKNER,

Resolved, That a vote of thanks be tendered to Dr. J. L. VATTIER, Chairman of Committee on Medical Colleges, in the Senate of

Ohio, last winter, and Dr. WILLIAM BUSHNELL, Chairman of the same in the House, for their services.

That a vote of thanks be tendered to Dr. J. MACK of the Senate, and Dr. L. BIGELOW of the House, as chairman of the Committees on Benevolent Institutions, for their services in that department.

Resolved, That as a testimonial of our estimation of the professional, literary and personal worth of our late President, Dr. G. W. BOERSTLER, a vote of thanks be tendered for his elaborate and comprehensive valedictory address forwarded to the Society, and read by Dr. KREIDER.

Dr. JONAS MOORE, a pilgrim father of the profession, (of Marietta,) reported to the Society that he has had an instrument constructed on the plan laid down by Dr. THOMAS, in Braithwaite's Retrospect for July, 1851, page 150, for the inhalation of nitrate of silver in substance. He had administered it to a great many patients in bronchitis with decided advantage.

On motion of Prof. St. JOHN, Prof. WILLARD PARKER of New York. was elected an Honorary Member of this Society.

On motion of Dr. A. CAREY,

Resolved, That a Committee be appointed to investigate and report upon the cause and the best mode of meeting and combatting the great amount of Quackery of every grade and description, both in and out of the regular profession, and of bringing the claims of the scientific and worthy portion of the profession fairly before the public.

Resolved, That said Committee also propose and report some plan of so popularizing the principles and literature of Medical Science as to adapt it to the schools and general reader in book and periodical form.

Committee, Drs. A. CAREY, BUCKNER and ROBERT THOMPSON.

On motion of Dr. T. G. CLEVELAND,

Resolved, That believing, that the awarding of prizes by the Society to the Physicians of Ohio for essays on subjects connected with Medicine or Surgery, will encourage research and investigation.—Therefore

Resolved, That a prize of Fifty Dollars be offered for the production of the best essay on such subject as shall be specified. Further,

Resolved, That the President appoint a Committe of five members to specify the subject, receive the communications, and award the prize to such as in their opinion possesses the greatest merit.

Resolved, That competitors for prizes deliver their communications on or before the first day of February, A. D. 1853, and that the Committee report at our next annual meeting.

The President appointed as that Committee, Drs. W. W. RICKEY, J. DELAMATER, J. P. KIRTLAND, C. E. AMOS and St. JOHN.

Dr. BUCKNER then called the attention of the Society to a valuable Stethescope of Dr. MARSH of Cincinnati, and gave a description of its extraordinary power and fineness.

On motion of Dr. HILLS,

Resolved, That a Committee of three be appointed to review the histories of reports, statistics, and other information in relation to Typhoid and Typhus fever in Ohio, and report to the next meeting of this Society.

Committee, Drs. R. HILLS, S. M. SMITH and KIRTLAND.

On motion of Prof. St. JOHN,

Resolved, That the thanks of this Society be tendered to the Railroad Companies for their courtesy in extending to its members free passage home over their roads.

Dr. BUCKNER then gave the history of a monstrosity, or double fœtus, of which he exhibited Daguerrean likenesses, including a front, back and lateral view.

The Chair continued Obituary Committee of last year.

Prof. KIRTLAND exhibited to the Society a singular ball or conglomeration found in the stomach of a cow, slaughtered near Zanesville: the ball seems to be composed of hair of a stiff or bristly character, and measures thirteen inches in circumference; twelve other balls of the same character were found in the same stomach.

On motion of Dr. BUCKNER,

A Committee of three was appointed to report delegates to the American Medical Association.

Committee. Drs. BUCKNER, HENDERSON and J. DELAMATER, who reported as delegates

R. THOMPSON,	Columbus.
R. HILLS,	Delaware.
M. Z. KREIDER,	Fairfield.
J. M. BIGELOW,	Fairfield.
ROBERT ROGERS,	Springfield.
W. W. RICKEY,	Cleveland.
J. MORRISON,	Columbus.
J. W. RUSSELL,	Mt. Vernon.
H. S. CONKLIN,	Shelby.
CHARLES ROBERTSON,	Morgan.
G. B. S. HEMPSTEAD,	Portsmouth.
JONAS MOORE,	Marietta.
P. J. BUCKNER,	Cincinnati.
T. G. CLEVELAND,	Cleveland.

On motion of Prof. KIRTLAND,

Resolved, That the thanks of this Society are hereby tendered its officers for the able manner in which they have discharged their duties.

The minutes were then read and approved.

On motion, Society adjourned.

A. I. BENNETT,
First Vice President.

R. G. McLEAN, *Secretary.*

APPENDIX.

Cincinnati, May 21, 1852.

G. Boerstler, M. D.,

President of the State Medical Society of Ohio.

Dear Sir:—At a recent meeting of the American Medical Association, held in Richmond, Va., the undersigned was appointed Chairman of a Committee to report on the "Epidemics of Ohio, Indiana and Michigan." In complying with the duties assigned him, he is anxious to procure all the information possible, relating thereto, and, therefore, requests the aid of members of the State Society individually, and also the recommendation of the Society, that County Societies assist in the same object. The mode in which County Societies may render effective and reliable aid, would be for members to make brief reports in relation to their respective neighborhoods, to the Secretary of their Society, who can, from them, make an abstract of the diseases occurring throughout the County, which abstract will be of great service to the undersigned in making out his report; and to the profession, by being made acquainted with the prevailing diseases of different localities.

Information is especially desired upon the following subjects:—Epidemic Cholera, Cholera Infantum, Dysentery, Diarrhea, Erysipelas, Intermittent Fever, Remittent Fever, Typhus and Typhoid Fever, Hooping-Cough, Influenza, Measles, Scarlet Fever, Small Pox, &c., &c. Any other form of disease appearing as an epidemic, will be understood as being included along with the above.

The points of greatest interest, to which attention is particularly invited, are cases giving rise to and favoring the propagation of a disease, or checking its progress. Prophylatics, Influence of Age, Sex, and Nativity, Prominent Symptoms, Extent of prevalence, Proportional Mortality, Duration of individual Cases of disease, and any other points that may bear upon the subject of disease; such as Soil, Geological formation, (in map form when practicable,) Natural Productions, Condition as to improvement, Water, Meteorological Observations, &c., &c.

It is preferred that reports be made to January 1st, 1853, and to refer mainly to the previous year. If any remarkable visitation of disease should have occurred previously, an account of it will be acceptable, carefully designating the date of its occurrence.

General Medical History of the changes which have occurred in diseases since the settlement of the country, will be acceptable.

It is desired that all reports sent to the Chairman, may be forwarded so that they may be in his hands by the 15th of January or 1st of February, 1853.

It is hoped that this appeal to the profession will secure a hearty co-operation in fulfilling the objects of the Association. Much useful matter may, in this way, it is believed, be brought together, which will be of value to the profession and the public.

I am yours, truly, GEO. MENDENHALL.

On motion of Dr. MURPHY,

Resolved, That this Society recommend to County Medical Societies throughout the State, the propriety of adopting the plan recommended in the communication of Dr. Mendenhall, and that an abstract relating to the Epidemic Diseases of this State, when made, be forwarded to him as soon after the 1st of January, 1853, as practicable, by the Secretaries of County Societies, for the purpose of assisting the Committee of the American Medical Association, appointed to report on the Epidemics of Ohio, Indiana and Michigan, in fulfilling the object of its appointment.

JOHN A. MURPHY.

[B.]

PRESIDENT'S VALEDICTORY.

One of the strangest features, which mark this galloping age of ours, is a want of due veneration for the past; a disposition to leap over all the barriers which age and experience have erected; and then, we but too often arrive at the terminus, before we have made the proper preparations for the start. We should ever remember that the healing art grows out of the necessities and calamities of the human family; and, therefore, imperious duty is imposed upon all its cultivators, to examine every avenue of knowledge, to become conversant with the various authorities that have poured in their aid during all the periods the science of medicine has been cultivated, and to bring, to the teachings of such authors, a deliberate purpose, carefully and sedulously to examine into his claims. To do this, does not require a high degree of intellect; for a sound mind with a proper degree of industry will accomplish it. Elevated intellect is the rich gift of Heaven; but, for the encouragement of manly enterprise, knowledge may be acquired by vigilant attention and sedulous care. He who relies, for professional reputation or on much usefulness, upon his own individual observations, places himself out of the pale of cultivated and improved science, for he can form no connection with the past—no relation to the future; and his cherished hopes for reputation and for usefulness will ultimately prove to him a bitter

delusion. In tracing the pages of medical history back to the earlier ages of man's existence, we behold many vagaries and phantasies entertained by the practitioners of the healing art; but when we look at the rude and uncultivated state of the mental and physical sciences, we cease to wonder at their want of skill in tracing the true relation between causes and their effects. Their very errors have proved to us a source of knowledge, and we should not too freely condemn their crude and unshapen opinions and doctrines. In our day, when education is so generally diffused, when science has shed its illuminating rays upon all subjects, we behold the promulgation and advocacy of absurdities greater than those of earlier ages. Do we not see our people captivated, fascinated, proselyted by Globulism, Hydropathy, Mesmerism, Electro-Biology, Spirit-Rappings, and a legion of other Tom-fooleries. This is a progression which overleaps all the barriers of past wisdom, and alike disclaims all knowledge flowing from study and reflection; into its elements ratiocination never enters; it jumps at all conclusions, and is ever ready to advocate any and all novelties and absurdities, if impudently proclaimed by brazen mountebanks, or more speciously gilded over with the nonsensical jargon of Globulism. If we could, upon this occasion, enter fully into the facts of history, and draw a parallel between the Medical and other Sciences, during the different cycles and epicicles of progression, it would be demonstrable, that in every period of the world, the science of medicine was as far advanced as any other; that amongst its votaries were the purest and brightest intellects, always in the foremest ranks in the pursuit of truth, unweariedly searching the great book of nature to gather and to taste the delectable fruits of knowledge, and to drink deeply at the fountain of philosophy. Our science ever has demanded from every votary, an honest purpose; a sound discriminating judgment to inquire into, compare and analyze the laws of nature, governing the physical world, and with a special reference to their influence on human organization; a patient investigation of causes and effects; a knowledge of the relationship of things, whether palpaple or recondite, with a determined will to search diligently and perseveringly for truth. Such a spirit of philosophic enquiry will lead, after years of labor, to the proper appreciation of the principles governing a science, whose relationships are with all nature. We claim, for ours, not only peerage with all other sciences at all periods of human progress, but we also claim, for its true disciples, a devotion to works of benevolence, unequalled by the members of any other profession, or by any class of men. The palace and the cottage, the dwellings of the rich and the hovels of the poor, alike bear testimony to this truth. When pestilence stalks over the earth, to strike the inhabitants with dismay and death!—when the warrior, who has won an hundred fields, quails and flies before his unseen foe; when the good man retires from the contest, broken-hearted and dispirited; when the inhabitants of the city fly to the country for help; when those of the country seek the caverns of the mountains

for safety; when the father abandons wife and children; when whole communities grow pale with fear, and no longer stretch forth the arm of succor;—go then, I ask you, into the midst of the pestilence; enter the wards of your hospitals; visit the dark lanes and filthy alleys of your towns and cities; look into the abodes of wretchedness and woe everywhere, and there you will find the true mediciner, as an angel of mercy, exerting the powerss of his art to rescue from death and the grave, those who have been stricken by the scourge. The small-pox has been robbed of its power to do mischief; the plague has been disarmed of half its terrors; contagion has been fettered by sanitary laws, emanating from our profession, and thereby millions of lives preserved for future usefulness; your hospitals for the sick; your asylums for the insane, the blind, the mute, all those noble charities, which now grace your State and every christian land, are here, as everywhere, the offspring of the enlightened intellects and benevolent efforts of members of the medical profession. If we trace the progress of medicine with the advancement of human society, we behold its benign and meliorating influences happily affecting all pursuits and classes of men. Reproach me not with being the eulogist of our profession. I have spoken but the "words of truth and soberness," in defence of a profession, whose purpose is to offer healing mercies to suffering humanity. What reciprocities have we asked, in return, from community? Not legal enactments, granting privileges to us, which may not be equally enjoyed by every other citizen of our noble State.

Four years ago we humbly petitioned your legislators, for laws to protect ourselves against those who were too ignorant and too unworthy to be acknowledged as members of our noble profession; and even this poor boon was denied us. The bad passions of bad men were aroused against us; the cry of privileged classes and monopolists was rung from the centre to the circumference of the State: demagogues were successful, and charlatans and pretenders were placed upon an equal footing with us, as teachers and practitioners, by the Solons in Columbus assembled. Nay, it is to be feared that ere long our noble public charities will either fall into the hands of charlatans, or be prostituted to vociferous patizans. Perhaps our State Legislatures may find a warranty in that of our National Government, which has legalized, protected and privileged, by its patent laws, the making and vending of the most abominable nostrums and disgusting quack medicines. Are our eyes not daily feasted with advertisements, in glaring capitals, and decorated with all sorts of pictures, to attract the attention of the public; newspapers, pamphlets and handbills are gratuitously distributed, to encourage the sale of their poisons; and the knaves, engaged in the most nefareous traffic, are bolstered up, but too often, by long certificates of very reverend and very veracious clergymen, who testify to the wondrous cures performed by Old Jacob Townsend's, or Sand's Sarsaparilla; Duncan's Wonderful Expectorant; Brandreth's and Wright's

Matchless Pills; and a thousand other nostrums. Such clergymen deserve not a place in your pulpits, where truth is to be promulgated, but in the pillory—the scoff and scorn of an abused but indignant public.

If the skulls of those who annually fall victims to the patent quack nostrums of this age, could be collected into one great heap, the pyramid of Cheops would appear but as a mole-hill beside this monument, commemorative of the infamy of the manufacturers and venders of those poisons, on the one hand, and the ignorance and folly of those who swallow them, on the other. Let an ignoramus mount the stage, and, by loud and impertinent assertions, promise to cure all manner of diseases, either by some secret nostrum, certified to by parsons and laity, or by some purely vegetable substance, and the people flock to him, purchase and swallow his nostrums with a gusto truly remarkable. Are not the globulists and water doctors extolled for their wonderful skill? the one for giving you infinitissimal doses, the other for teaching you to keep the external man clean; the latter deserves the more credit, for there are some diseases which will readily yield to goodly portions of soap and water.

The absurdities of Hahnemann and Priesnitz find votaries alike from the educated and the illiterate. Do not believe that we complain of these things in consequence of any pecuniary interference; for the more poison you swallow, the greater the need for medical aid. It is the shattered or ruined constitution consequent upon swallowing patent nostrums, or the progress of unchecked disease to its fatal termination, following the do-nothing system of the globulists; the sacrifice of a father and mother's life, so essential to the well being of their offspring; these are the melancholy scenes so often witnessed, over which the enlightened medical man is called to sorrow, and which we would fain correct, by an appeal to an enlightened public.

We ask of you, no special favors; but we have the right to demand of you, as honest men and moral beings, to mete out to us the same justice, which you so readily extend to other professions. The rigid rules of your courts of justice, by which ignorant pretenders are excluded from interfering with your rights of person and property, very properly receive your cordial approval. To the regular members of your churches, you pay a proper and high respect; but the illiterate and itinerate *pretender*, who arrogates to himself the *exclusive* authority to promulgate the word of eternal truth, receives your scoffs and reproofs. And yet, how often does the mountebank, who, by bold and flagrant lies, promises to cure all curable and incurable maladies, by his infallible powders, pills and draughts, receive the approved and material aid of the public. All we ask of you, is to exercise the same discrimination and judgment in selecting your medical advisers, which you exercise in matters of property; which, though valuable, are infinitely less so than health

or life. Act thus, and you will cast around yourselves and families a shield strong and impervious, which will protect you against all Charlatanary, whether under the bold front of the street mountebank, the arrogant pretensions of the patent nostrum vender, or the more specious promises of the globulist.

I refrain from pursuing this subject farther, and will now address my remarks more directly to my professional brethren, in presenting for their consideration, some of the advantages which may reasonably be expected to result from medical organization.

The necessity for a more perfect organization than was afforded by the State Medical Convention, was long felt by the profession; and four years ago, some dozen members duly impressed with the idea, that an establishment of a properly regulated society, would contribute to the diffusion of medical knowledge, assembled in Columbus, and there formed the nucleus of the present State Society. At the next meeting of the legislature, a charter was prayed for and obtained, creating this a corporate body, which gives to it a permanence of existence, that could not be attained by our State Convention. Three annual meetings have been held, and we now number two hundred and thirty-six members, residing in every section of this great State. By a regulation of our by-laws, it was decided to hold our meetings permanently in Columbus; but, at the last June session that clause was repealed, and it was decided to hold the meeting of 1852 in Cleveland, the beautiful "Forest City," whose wide and beautiful clean avenues, magnificent buildings, and enchanting shrubberies are seen for the first time by many of us. The fraternal welcome by the resident profession, the cordial reception by the citizens, an examination of the splendid and well arranged temple dedicated to medical science, a more intimate acquaintance with the learned Faculty who so ably teach the various branches of medical education in this temple:—all these unite to cheer and gladden our hearts, and we feel that it was good for us to come up and commune with our brethren of this enchanting city. Indeed, one more reception like this, to use an Hibernaism, would convert the Society into a "*permanent* itineracy."

By our charter we have the right, which we have already exercised, to create auxiliary societies. These, if properly conducted, cannot fail of doing much good for the medical profession. Suppose each county in the State shall have an auxiliary society to meet monthly, quarterly, or annually, as may be determined: and at each meeting papers shall be furnished of practical investigation into the causes, character and treatment of diseases; noticing in all instances the results, and as often as possible the post mortem appearances. Let it be made the duty of each member to observe and record the Thermo and Barometric changes, the influence upon the health of each vicinity, the changes of the different seasons, with their effect upon health; note especially any and every epidemic; give a description of the various localities where such epidemics pre-

vail, describing the habits, employments and dwellings of the people, and the face of the country; whether hilly or low, dry or marshy; and add to these a register of births and deaths. Let it be made the duty of the presiding officers, or a special committee appointed to examine all these reports and embody all important matters in one general report, to be transmitted to the parent society; let this be done, and an amount of useful information will thus be accumulated; the diseases of every section of our State will be understood by all; and the profession of Ohio will soon be upon an equal footing with that of the older States, where medical organizations have heretofore placed them in advance of us. In population, commercial and agricultural advantages, our noble State occupies a front rank among its sisters of this glorious Union; a union which, God grant, may never be dissolved. And shall it be said that the medical profession of Ohio shall form part of the rear guard of Science, as its sons will ever be fouud in the advanced front column, for the defence of Union! Liberty! Country! So let the votaries of medical science be ever among the advanced column of the Corps Medicale. It is to the young members of our profession that we would offer every incentive to press forward in the race for high scientific attainments. Look around you, and you behold a goodly number of your brethren whose heads are silvered with age, and whose physical energies are almost exhausted. They have left their homes to meet and to greet you, to pour, what of experience a long life of professional tact has enabled them to gather, into the common lap of this, our common parent society, for the mutual benefit of all. You will soon be required to take their places, and it should be your earnest purpose, as it is our sincere desire, to attain a higher degree of knowledge and be more useful to mankind than has fallen to our lot. You possess many advantages, both in primary and collegiate education, in the more perfect teachings of our medical colleges; in the immense advances which ours, as well as all collateral sciences have made within the last half century. In this wonderful age of universal progress you cannot, you dare not, you will not have the finger of public scorn pointed at you and here the reproach of, "these are the drones in the hive of human industry and advancement." A most striking feature of our age is associated effort. By it, the great and stupendous works which mark this country as the most remarkable, have been projected and executed. The lightning of Heaven is made to traverse the earth in all directions obedient to man's volition, as the messenger of his thoughts and desires. The power of steam now transports man and things over oceans, lakes and rivers, with a celerity most astonishing. The iron horse of our railways, the complicated machinery of the various manufactories is propelled with a certainty and regularity that imports the idea of mind, not matter, being the motive power. These and a thousaud other wonders are accomplished by associated effort, and are so many monuments of the genius and skill of our intelligent and free people, and speak the unexampled progress of this nation.

The great element of progress seems to be organization, a universal motive power, influencing all classes of society, and applicable to all pursuits. We as a profession, feel its influences, and will avail ourselves of its benefits, in marching onward with the progress of the age. Our association offers the hand of fellowship to all who are desiring to contribute their mite to the common stock of useful knowledge. Here, old friendships will be renewed, and new ones formed. Minds previously isolated, will commune freely with each other, and this mutual interchange of unreserved opinions will awaken new and delightful sympathy. Here, our mutual interests are more clearly felt; and this community of interests and of noble purposes must inspire every bosom with fraternal friendships, and thus call into active exercise the higher qualities of our nature. Under these sentiments of mutual confidence, mind is brought into contact with mind, and thus, clearer conceptions of the great truths and ultimate aim of our science will be had, and a boldness will thereby be imparted to the timid, to examine freely all new propositions and theories. The exuberance of the young will be repressed or corrected by the cooler judgments of the old; and the old will feel their wearied and flagging powers invigorated and refreshed by the more vigorous efforts of their younger brethren. Thus all will be improved and benefitted by this kindly interchange of opinions, sentiments and sympathies.

The influence of association is not only manifested in man's intellectual powers, but is equally so in his moral nature. For the promulgation of that religion, which all should believe, and which all properly cultivated intellects reverence, the Master organized a band of disciples who went forth and presented to the minds of the benighted heathen the illuminating and cheering light of the highest moral truths; they organized auxiliary communities, and sent forth their heralds, until the gospel of truth has been spread over the habitable globe, and man now feels and enjoys the meliorating influences of that truth, which speaks peace to the troubled conscience, and gives the support of a well grounded hope to the pilgrim here on earth, and the assurance of a glorious immortality hereafter. May we not, in our humble pursuits, by the aid of organization, reasonably hope to arrive at newer and higher truths in our science, and thus be empowered to minister more to the sufferings and calamities of humanity! This is a reasonable expectation. Honesty of purpose, unceasing industry, an entire devotion to the just demands of our noble profession, will give us increased powers of doing good to our fellow man; and when we shall lay our heads down upon the pillow of death, we will then have the conscious support, which flows from a well spent life. Justly claiming to be ever foremost in the ranks to *do good unto others*, we would present the beneficial influences of our association to such of our brethren who may have chosen the profession as the mere instrument of pecuniary emolument. Contemplated under this aspect, it is indeed without

the allurement of charm, and its appeals to the generous affections of the heart must remain unheard, and every proper incentive to noble actions must be paralyzed. If there are those who have chosen the profession of medicine as the means to get gold; as a trade to gather pelf; we say then that every additional fee will be a new evidence of their sordid degradation, and sink them deeper in the slough of Mammon. Such we would invite into our association, to become co-laborers with us, and they will soon find themselves elevated in feelings, sentiments and actions, and become worthy members of a liberal profession. There are other professional brethren, whom I would in a most special manner invite into, and around whom I would throw the panoply of our association. I refer to those erring brethren, whose generous impulses endeared them to their friends, whose fine intellectual endowments gave sure promise to high distinction and future usefulness: but who, partly from their social feelings, and those necessary exposures by day and night, consequent to the practice of the profession, were first induced to drink a little, until the repetition of little drinking resulted in habits of free potations; which, if persisted in, must terminate in the total blight of future usefulness; the utter wreck of intellect, of character, of property, and the annihilation of all moral perceptions. Such our association desires to take by the hand, and by prudent and wise counsels, by kind and gentle treatment, and perfect uprightness of conduct, lead them back into the paths of propriety, encircling them with our fraternal embrace, and protecting them against the evils of their tempter.

I have thus endeavored to portray, feebly it may be, some of the benefits which may reasonably be expected from medical association. If I have succeeded in awakening reflection on this subject, my purpose has been obtained, and I cheerfully leave its further developement in other hands.

In conclusion, let me again advert to auxiliary societies, and urge their formation in every county of the State; and upon a plan which shall insure full reports upon the various geological structure, meteorological observations; the history of epidemics, their treatment and results; a description of all remarkable cases, the treatment and results, and as far as possible, the post mortem appearances; these, with registers of births and deaths, would afford a rich fund to the parent society. As the thousand little rivulets flow together, forming mighty rivers, so will the thousand streams of knowledge, poured into the common reservoir, swell the State Medical Society of Ohio, into an importance to the republic of medicine, equal in magnitude and usefulness, as are the mighty lakes and noble rivers of our State to the commercial prosperity of the entire Union. Let our motto be, the union of medicine, and the union of our glorious country, "one and inseparable, now and forever." In the language of Father Paul, we say "*Esto perpetua.*"

[C.]

REPORT OF THE COMMITTEE ON PRELIMINARY EDUCATION.

The Committee to whom was confided the duty of organizing "a Board of Examiners," for Students about to enter upon the study of Medicine, &c., touching their mental qualifications and preliminary education, beg leave to report: That in discharge of the duty assigned them, they have felt the full force of the many difficulties, which presented themselves, in the practical and successful arrangement of a plan which shall be adequate to the accomplishment of the important end designed, viz: The elevation of the standard of Medical Education.

Yet many as are the obstacles to be overcome, we are not without hope, that most, if not all of them, may be remedied by the *united influence* and co-operation of the profession.

That a high standard of education is essential to the success, and elevated moral standing, in all the learned professions, is a truth, so fully felt and acknowledged, that we feel it would a waste of your time, were we to attempt any discussion of the subject before this intelligent assembly. Certainly, of *none* is it more *true* and *important*, than of the medical profession. No one needs more than the Physician, the highest endowments, both natural and acquired. No one needs a more thorough mental discipline, more varied or available information.

In commanding powers of intellect, the wealth of learning, or the fascinations of eloquence become the Orator, or Jurist, or Statesman, or Divine; is it less important to the Physician, who is entrusted with the health and lives of community? Let him, then, assidulously cultivate his mind, invigorate and enlarge it by habitual and manly use, and enrich it with the treasures of all appropriate learning.

That medicine is a responsible profession may be seen by observing the relations which it sustains to society. All gradations in society are afike dependent on us, and must sooner or later require our assistance. The philosopher and the divine, the statesman and the citizen, are all amenable to disease—are all inheritors of that sin which "brought death into the world, and all our woe;" and whether the couch of the dying be of eider down, or of straw and rags, the dark and rugged path-way to the tomb must be rendered smooth by the hand of the physician.

Thus charged with the health and lives of our patients, it is a duty we owe to ourselves, to the honor and welfare of the profession; to society at large; to guard the portals which lead to the temple of Medicine, and see that none are permitted to enter, who have not *strong natural capabilities*, coupled with a *sound preliminary education*.

Medicine is one of the most responsible professions on earth. It therefore, should be learned, honorable, elevated and dignified. To make it such in Ohio, should be the great object of this Society. It is a lamentable truth, that the medical profession is fast being overstocked—not with men of high mental and moral culture, but with a

class of men assuming the name of *doctors*, totally unqualified for the solemn duties of the profession.

Talk as we may of empiricism among the Steamers, Eclectics, Hydropathists, Homœopathists, *et id genus omne*, but the fact cannot be concealed, that a large amount of quackery—aye! downright quackery, exists among those who profess to be the followers of a Mott, a Dunglison, a Chapman, a Pancost—and in the West, a Drake, a Dudley, a Mussey; and we might name hundreds of others who have not only immortalized their names by their splendid acquisitions in medical literature, and profound knowledge of general science, but have shed a *halo* of glory around the countries which gave them birth.

In the consideration of our subject, there is a fact, however, to which we would direct your most serious attention. You have all, no doubt, observed that a species of *mania* is prevailing in the profession to *manufacture doctors*. If we cast our eyes over the various catalogues of the Medical Schools of the United States, we find a list of between two and three thousand annually in attendance—a large portion of whom, according to the testimony of Prof. Drake, are destitute of a knowledge of the elements of a common English education. If not a majority, a large number of these students, after having attended a course of lectures—many of them not having read eighteen months under the direction of a competent preceptor—start out in life, and advertise themselves "*doctors*," and as an essential preliminary, to bring themselves into notice, take two or three students, whom they have induced to read medicine, to secure the patronage and influence of their friends, without any regard to their mental or moral qualifications.

We would not magnify the evils of our present system of medical education—but feel assured we utter the language of stern and startling truth.

More than twenty years ago Prof. Drake declared that he could not be mistaken in asserting that a large portion of the profession in America were deficient in common school learning!

"I am constrained to say," wrote the learned professor, "that the profession abounds in students and practitioners who are radically defective in spelling, grammer, etymology, geography, arithmetic, and book-keeping. Were this confined to irregular members of the faculty, it would be an affair of little magnitude; but extending to many of the graduates of all our Universities, it calls for unreserved exposure, and unqualified reprehension."

Although these remarks were made many years ago, when the facilities for acquiring an education were far less than at the present time—and while we are proud to know that medical science has made rapid and important advances since that time, yet we cannot forbear to declare our solemn conviction, that, to a very great extent, ey are as applicable to the profession *now*, as they were *then*. id we feel assured that by this cause, more than to any other, has

regular medicine lost its once elevated and legitimate position, as well as its just claims to public confidence. It is from ignorance and quackery *in our own ranks*, more than from all other sources, that we have suffered.

And how shall these things be remedied? The work would seem properly to belong to the people. They are most interested, because *they* are the sufferers. But in many instances they are unable to decide between the claims of regular medicine and the sheerest quackery of the day, and often the whole profession is measured in the public estimation, by the blunders and ignorance of some charlatan sailing under our colors.

In vain will the profession look to the *people* for protection! We must protect ourselves! We have the power, and it is our duty to arrest the progress of this wide-spread and increasing evil, or the practice of physics will be given up to a set of rapacious knaves and block-heads, whose highest and most fond desire is *wealth!*

The remedy we propose is efficient, and at the same time simple and practicable. *No young man should be permitted to engage in the study of medicine who has not strong natural endowments, and a good English education.*

These are two grand pre-requisites which should ever be insisted upon by private preceptors. They are essential and inseparable. Natural capabilities, unaccompanied with a respectable education, are insufficient to master the elaborate and abstruse science of Medicine, and *vice versa.*

Neither medical schools, nor *legislative enactments* or National Conventions, can accomplish anything towards salutary reform, in this particular, unassisted by the hearty co-operation of the private preceptor. Here is the starting point; with them must commence the *preventive system*, which will exclude from our ranks incompetent men, and prevent their entering the profession.

To accomplish this desirable object, we would recommend the appointment of a "Board of Examiners," in accordance with the spirit and objects of the resolutions offered by the Chairman of your Committee, and passed at the last meeting of this society, which resolutions we beg leave to make a part of our report, viz:

Resolved, That a committee of three be appointed to nominate and report to this society, at their next meeting, "a Board of Examiners consisting of five members, whose duty it shall be to examine all applicants who may wish to commence the study of medicine and surgery, touching their qualifications and preliminary education, and grant to such applicant, if found qualified, a certificate of his qualifications."

Resolved, That it shall be the duty of said Board, to satisfy themselves that the applicant possesses sufficient energy of mind, is of good moral character, and has acquired a good English education, embracing a knowledge of Natural Philosophy, and the elementary Mathematical Sciences, including Algebra and Geometry.

Resolved, That no member of this society shall hereafter receive into his office any person as a student of medicine, &c., without a certificate from the Board of Examiners, stating that he has been examined and found qualified to commence the study of medicine as herein provided for. Or on the presentation of a diploma from some lierary college.

In adopting this standard of primary studies for students, we have aimed to conform to the recommendation of the American Medical Association on this subject, who, we feel assured, have been governed by the most liberal spirit to the student, at all compatible with his interest and standing in the profession, and the successful prosecution of his studies—or consistent with the honor and welfare of thc profession and the public good.

We would not, therefore, be understood as limiting the student in his course of preparatory studies to this standard, or as underrating a liberal and classical education. But where it is possible, would urge upon every young man who intends to pursue the study and practice of medicine, to obtain, first, his degree of "Bachelor of Arts," in some reputable college. His diploma would furnish evidence of qualifications, and may be received as a voucher, equivalent to a certificate from the Board of Examiners.

To carry into effect the objects of the foregoing resolutions, we have corresponded with a number of gentlemen in different sections of the State; and are happy in being able to present the names of the following gentlemen, of high literary attainments, eminently qualified for the duties assigned them, who have expressed their willingness to serve as a "Board of Examiners," for the State Medical Society, and in this way contribute to the advancement of general science, and particularly the elevation of medical science.

We would, therefore, nominate the following persons as said "Board of Examiners," viz:

Ashland.—B. B. Clark, M. D., D. Armstrong, M. D.
Ashtabula —Hon. J. R. Giddings.
Athens.—
Belmont.—E. Gaston, M. D., —— Alexander, M. D.
Champaign.—E. P. Fyffe.
Clark.—R. Rogers, M. D., B. Gillet, M. D.
Clermont.—M. H. Medary.
Columbiana.—B. Stanton, M. D., Geo. McCook, M. D.
Coshocton—A. L. Cass, M. D., Gen. J. Burns.
Cuyahoga.—J. S. Newberry, Geo. Hoadley, Esq., W. D. Beattie.
Darke—Joseph Fuzelle, J. F. Gard, M. D.
Delaware.—R. Hills, M. D, A. Edwards, Esq.
Erie—D. Tilden, M. D., John G. Camp, Esq.
Fairfield.—Hon. W. Medill, Hon. H. C. Whitman.
Franklin.—C. B. Flood, Esq., R. Thompson, M. D.
Fulton.—J. Reed, Esq., D. White.
Gallia.—S F. Vinton, Simeon Nash.
Geauga.—Ex-Gov. Seabury Ford, L. H. Hamilton, M. D.

Greene.—Aaron Harlan, E. S. Martin, M. D.
Guernsey.—Wm. Lawrence, P. B. Ankeny.
Hamilton.—J. L. Vattier, M. D., John A. Murphy, M. D.
Huron.—M. C. Sanders, M. D., E. T. Stickney, Esq.
Holmes.—A. S. Maxwell, M. D., Wm. Irving, M. D.
Jefferson.—Hon. S. Means.
Knox.—Gen. G. W. Morgan, J. N. Burr, M. D.
Lake.—John W. Howden, Esq., —— Doolittle, Esq.
Lawrence.—J. P. Bing, M. D., C. Briggs, M D.
Licking.—John N. Willson, M. D., W. Barven.
Lorain—E. W. Hubbard, M. D., L. D. Griswold, M. D.
Lucas.—W. W. Jones, M. D., D. O. Morton, Esq.
Medina.—M. E. Hoag, M. D., L. D. Tolman, M. D.
Mahoning—Dr. Barclay, Dr. Cook.
Mercer.—W. Hunter. Esq.
Miami.—G. Volney Dorsey, M. D.
Montgomery.—Edward Smith, M. D., H. Steele, M. D.
Muskingum.—C. C. Hildreth, M. D, Col. Elias Ellis.
Perry.—W. S Fink, Esq., Jno. H. O'Neal, Esq.
Pickaway.—Hon. Edson B. Olds.
Portage.—Dr. Town, Thos Earle, M D.
Richland—Wm. Bushnell, M. D, James P. Henderson, M. D.
Ross.—Hon. A. G. Thurman, Dr. Silvey.
Sandusky—P. Baugrand, M. D., E. F. Dickinson, Esq.
Scioto.—John Glover, M. D., G. B. S Hempstead
Seneca.—E. Dana, M. D, J. McFarland, M. D.
Stark.—D K. Cartter, Esq., John R Cecil, Esq.
Summit.—L. V. Bierce, Esq., C. W. Rice, M. D.
Tuscarawas.—A. J. Bennett, M D.
Trumbull.—Julian Harmon, M. D., Hon. D. Tod.
Vinton.—Hon. S. F. Vinton, Simeon Nash, Esq.
Washington.—J. D. Colton, M. D., Jonas Moore, M. D.
Wayne.—L. Firestone, M. D., Sumner Pixley, M. D.
Wood.—James Robertson, M. D., J. C. Spink, Esq.

In this arrangement of the board, we have deemed it best to increase the number and to locate them at a number of prominent points in the State. In doing so we have been governed by a desire to render some one of the members acceptable to every student in the State, within the distance of a day's travel, and also to divide labor so as not to make it burdensome on the members of the Board.

We would make it the duty of each one of the Board to keep a record of the *time, name* and *result,* of every student examined and passed, and report the same to the Secretary of the State Society, annually, a month preceding the meeting of Society; in which report it would be well to distinguish the standing of each by the terms *qualified, well qualified,* and *very well qualified,* as it will act as an incentive to applicants to make higher attainments in their preliminary studies. These reports should be filed and preserved by the

Secretary, and made part of the minutes of the Society—which will, in time, form an important item of statistics in the history and medical literature of Ohio.

By the third resolution, it is made absolute and binding on the members of the State Society, to receive no student into their office hereafter until he shall have passed an examination before this "Board," and obtained a certificate of qualifications. Here our power or authority ceases. We would, however, most earnestly *recommend* to every regular physician in the State, who loves his profession and desires to advance its interests, by elevating the standard of preliminary education, to conform to the spirit and letter of the resolutions, whether he be a member of the State Society or not.

If the State Medical Society will take this stand in favor of a uniform and higher standard of primary education, we feel assured that every high-minded, honorable preceptor in the State, will gladly conform to the requisition. It will free them from the unpleasant task and responsibility of refusing to take young men into their offices, whom they know to be deficient in mental capabilities or primary education—a position which few have the moral courage to meet, especially if the applicant is a young man backed by a large and numerous circle of friends and relatives of wealth and influence, the patrons of the preceptor. A case, we are confident, by no means uncommon. By adopting this plan, of requiring a certificate of qualifications from a "Board of Examiners," we shift the responsibility, and secure a uniform and higher order of primary qualification in the student.

Another very important result, it is believed, will follow the organization of such a Board of Examiners. It will furnish a better class of students for our medical schools, and lay the foundation on which we may ask and expect their co-operation, by requiring a higher standard of qualification in the candidate for the doctorate.

We would, therefore, *recommend* to the medical schools in Ohio, to demand of all candidates for graduation, first, a certificate from the preceptor, of his good medical reading, stating the length of time he has actually been engaged in the study of medicine. Second, that he shall also furnish a diploma from some respectable literary institution, or in the absence of such testimonial, he must furnish a certificate from one of the Board of Examiners, of his qualifications to enter upon the study of medicine, as provided for in the foregoing resolutions.

In this connection there is another point to which we call the attention of the private preceptor, which we deem of vital importance.

It is the regular daily or semi-weekly examination of their pupils, upon the various branches of their course of studies. We know that this is a matter too much neglected. No preceptor discharges his duty to his pupil—to the professors in the schools, or to the public, who fails to discharge this duty; and yet, how few perform it as it should be! Were our students regularly examined in this way, they

would be more familiar with the subjects of their studies, and be much better qualified for the quiz class. It would overcome that embarrassment which often prevents him from telling what he does know, and it would correct many erroneous opinions which he may have embraced, and save him the mortification of having them exposed and corrected before a public class.

If we view this subject in the spirit of an enlightened philosophy, we cannot but see how great are the responsibilities of the physician. It is his mission to mitigate human suffering and woe—to re-kindle the lamp of life about to be extinguished—to throw the sunlight of joy and peace around the social circle—to restore to the domestic fireside the music of love, and hope, and happiness; and is it not a glorious mission!

Then let each member of this Society labor to elevate the character and standing of our profession, and endeavor, by every honorable means, to advance it interests and its dignity.

Whilst other departments in the arts and sciences are marching forward with gigantic strides, to fame and usefulness, we owe it to ourselves and to society, to exert all our energies to redeem the profession from the degradation to which *quackery* and *neglected education* have reduced it, and to raise it to the high and honorable position to which it is justly entitled.

When we do this, and not until then, will we see regular medicine triumph over ignorance, and prejudice, and quackery, in all its hydra-headed forms. Then will we see our medical colleges thronged by students of a higher order of talents and litterary attainments.

All of which is respectfully submitted.

P. J. BUCKNER, M. D. *Ehairman.*

The Committee to whom was re-committed the Report on "the preliminary studies of students about entering on the study of medicine," beg leave further to report: That we have most cheerfully complied with the instructions of the Society, so far as we have been able, or have been furnished with the means or data to carry into effect the instructions of this honorable body, in the following particulars, viz:

1st We concur in the suggestion of adding two members from each auxiliary society, and two from each county where there are no auxiliary societies, throughout the State. But for want of a knowledge of the proper persons to supply the list, must, necessarily, return the report incomplete; but beg leave to suggest that leave be granted, either to the Chairman of your Committee, or to the Secretary of this Society, to complete the Board as above indicated, as soon as practicable after the adoption of the report, should that be the final action of this body.

[D.]

REPORT ON A SUBSTITUTE FOR QUININE.

Dr. Edwards, Chairman of Committee, to whom was referred the important question of a substitute for Quinine, reported verbally; That the most pressing cause for the enquiry, the high price of Quinine one year since, has happily subsided, and Quinine is now accessible at fair prices. His attention was directed to the Bebeerine, from reports of European Journals, and he gave it a fair trial in the Hospital in treatment of Intermittent fever, and reports the cases and results. He much prefers the Bebeerine in Neuralgic affections, as it does not produce Tinitus Aureum or other unpleasant symptoms frequently found after the use of Quinine. In two cases of facial neuralgia, one existing four years, and during that period resisted all remedial agents, the patient was only comfortable when at sea; the other a sufferer of five weeks, and simply modified or temporarily relieved by Quinine. The Bebeerine acted as a charm, and after one week's use in doses of 5 grs. three times a day, the cases were entirely relieved. The use of the Bebeerine was not satisfactory in Intermittents, either in spring or fall. The Committee could not report a substitute, and asked to be discharged.

Abstract of cases treated by Bebeerine in Commercial Hospital and Lunatic Asylum, Cincinnati, in August, 1852.

Thomas Cross, aged, 33; Laborer.

August 5th.—Sick 3 weeks. One week since seized with intermittent fever; chill every other day, tongue coated yellow, bowels torpid, skin and pulse natural. R‖ House pills, and Bebeerine in Sol. gr. v. every 3 hours after bowels are moved.

Aug. 6th.—Had slight chill and but little fever; Bowels moved 6 times. R‖ Bebeerine cont'd.

Aug. 7th.—Slight chill yesterday; bowels moved 5 times; tongue furred; skin cool and moist; pulse natural. R‖ Bebeerine cont'd.

Aug. 8th.—Tongue coated. R‖ Blue Mass. gr. x. R‖ Bebeerine cont'd.

Aug. 9th.—Missed chill. Cont'd. Bebeerine. Aug. 10th. Missed chill, rested. Aug. 11th. Do. Aug. 12th. Rested. Aug. 13th. Sent to convalescent ward, and was discharged on the 16th. This man took drms. iij and scrup. j Bebeerine.

J. Schaffer, age 56; Tin-plate worker.

Sick 3 weeks; complains of general weakness now; early history obscure; bowels loose since yesterday, constipated before. R‖ Ol. Ricini. Aug. 6th. R‖ Bebeerine gr. iij three times a day. Aug. 7th. Cont'd med. Aug. 8th. Discharged well.

John Hayes, age 21; Boatman.

Aug. 5th.—Sick five days with intermittent of the quotidian type; tongue coated; bowels costive; skin natural in temperature and moist; pulse natural. R‖ Sub. Mur. Hyd. x. Ext. Hyosciamas gr

iij, when bowels moved; R‖ Bebeerine grs. v. every 2 hours, commencing early in the morning. Aug. 6th. Bowels opened twice last night; had a chill. R‖ Cont'd Bebeerine. Aug. 7th. Had a chill last evening; skin cool and moist; pulse natural; tongue coated brown and moist. R‖ Bebeerine Cont'd. Aug. 8th. Had a slight chill last night; tongue coated yellow; skin natural and moist; bowels opened 3 times. R‖ Cont'd. Bebeerine, Hyd. Cum. Creta. Pulv· Dov. a a grs. iiij every 3 hours. Aug. 9th. Had a slight chill last night; tongue coated yellow; skin and pulse natural. R‖ Med. cont'd. with Bebeerine grs. v. every 3 hours. Aug. 10th. R‖ Med. cont'd. Aug. 11th. Had a chill yesterday. R‖ Quinine grs. v. every 3 hours. This was the last chill.

Daniel Lawless, age 32; Laborer.

Aug. 5th.—Sick six weeks with intermittent fever; tongue nearly clean; pulse and skin natural; bowels not open to-day. R‖ Hyd. Sub. Mur. Ext. Rhei. a a grs. x. now, and R‖ Bebeerine grs. v. every 2 hours in morning. Aug. 6th. R‖ Bebeerine cont'd. Aug. 7th. Better; missed chill yesterday. R‖ Cont'd. Bebeerine. Aug. 8th. R‖ Cont'd Bebeerine. Aug. 9th. Discharged.

John McCall, aged 22; Boatman.

Aug. 6th.—Has been sick 10 days, with chill every day at 2 P. M.; tongue dry; coating dark; fever passing off. R‖ Cal. grs. x. Ext. Rhei. grs. xx. now, and Bebeerine grs. v. every 4 hours after bowels are moved. Aug. 7th. Skin and pulse natural; bowels open 6 times; tongue slightly coated yellow. R‖ Bebeerine cont'd. Aug. 8th. Tongue coated yellow; skin and pulse natural; bowels opened 3 times; had chill yesterday. R‖ Bebeerine cont'd. Mass. Hyd x grs. at bed time. Aug. 9th. Had a chill yesterday; was bled ozs. xij while in the chill; the chill was arrested by v s; fever slight; pulse and skin natural; tongue coated yellow; bowels opened several times. R‖ Cont'd Bebeerine. Aug. 10th. Had chill. R‖ Quinine grs. xx. div. in powders no. 7, one every 2 hours. Aug. 11th. Missed chill. Aug. 12th. Rested. Aug. 14th. Discharged. This man took 160 grs. Bebeerine without effect, and was relieved by scrp. j of Quinine.

Thos. Philips; age 21; Boatman.

Aug. 7th.—Has intermittent fever, quotidian type, chill comes on at 6 o'clock; has had for 10 days; tongue furred; bowels regular; has headache. R‖ Cal. grs. xv. Rhei. grs. x. m. Aug. 8th. Had chill last night, was purged freely; tongue coated. R‖ Bebeerine grs. v. every 3 hours. Aug. 9th. Pulse 95, full and strong; tongue coated dark brown, moist; bowels moved freely; skin warm and dry. R‖ Bebeerine cont'd. Aug. 10th. Pulse full, frequent and strong; skin above the natural temperature; bowels were moved four times; tongue coated and brown. R‖ Quinine grs. iij every 3 hours. Aug. 11th. Neutral mixt. half oz. every 3 hours; no chill after this. Was discharged on the 19th.

Michael Croming, Laborer.

April 15th.—Sick three weeks; chill every other day at 11 o'clock; says he has had dysentric discharges; tenderness along the arch of colon; tongue furred; pulse 100, and full. R℞ Cal. grs. x. Pulv. Dov. grs. v. 16th. Bowels opened freely. R℞ Bebeerine grs. v. every 3 hours. 17th. Had chill. R℞ Cont'd Bebeerine. 18th. R℞ Cont'd Bebeerine. 19th. Free from disease after last paroxysism until 10 o'clock this morning, had chill. R℞ Bebeerine grs. v. every 3 hours. 20th. Quite well. R℞ Cont'd Bebeerine. 21st. 10 o'clock A. M. had severe chill. R℞ Quinine v. grs. every 3 hours. 22d. Feels well. R℞ Cont'd. Quinine. 23d. Free of chill. 24th. R℞ Cont'd. Quinine grs. iij every3 hours. 25th. Well, no chill since using Quinine.

Patrick Bargin, age 26; Laborer.

April 17th.—Has had a chill every day for six days, the last one came on last night about midnight. R℞ Cal. grs. x. Ipecac. grs. v. now, preparatory to the Bebeerine. 18th. R℞ Bebeerine grs. iij every 3 hours. 19th. Had a chill last night. R℞ Bebeerine grs. v. every 3 hours. 5 P. M. had fever almost all day. 21st. Had chill at 5 P. M R℞ Quin. grs. v. every 3 hours. 22d. Had no chill this day. R℞ Cont'd. Quinine. 23d. No chill. R℞ Cont'd. Quinine. 24th. No chill. R℞ Med. cont'd. 25th. Well.

[E.]

REPORT OF THE BIOGRAPHICAL COMMITTEE.

Your Committee is under the painful necessity of still adding to its former report. Since the last meeting of this Society, two deaths have occurred among its numbers—those of Dr JOHN C. NORTON, of Marion, Marion County, Ohio, and Dr. EDMUND SMITH, of Dayton Ohio.

We are enabled to give only brief sketches of the lives of each. They will be noticed in the order of their deaths.

DR. JOHN C. NORTON.

We were a near neighbor, an intimate associate, and warm friend of Dr. Norton's, and can well speak of his general character from personal knowledge; but we have been furnished by his friends with the particulars of his life.

Dr. John C. Norton was born at Berlin, Hartford Co., Conn., in 1814. He died in Marion on the 16th of July, 1851, and consequently was thirty-seven years of age at the time of his death.

His father, Stephen Norton was a respectable farmer of Berlin, but at an early age the son went to reside with his uncle, Prof. Chas. Hooker, of Yale College, Conn. His uncle gave him a liberal literary education, and aided him through his professional progress. He graduated in the Medical department of Yale College in 1836.

In the fall of 1836 he came to Ohio, and commenced the practice of medicine in connection with his late uncle, Dr. Alson Norton, of Big Island Township, Marion Co., having the peculiar ad-

vantage of professional association with one widely experienced in, and conversant with the diseases incident to the western country and climate.

In 1839 he removed to the town of Marion, and here by his talents and industry, he earned a wide reputation and extensive patronage, and continued actively engaged in his profession until his death.

Dr. Norton was one among the early and regular attendants upon the Medical Conventions of Ohio, and was also enrolled among the older members of this Society.

It will be recollected by his associates that he was an occasional contributor to the literature of our Conventions, and frequently participated in the discussions of important practical subjects before this Society. On all such occasions his remarks were characterized by sound common sense, close observation, and acute discrimination, with much originality of thought.

Such was his character, and as such was estimated by those around him. At the time of his death he was President of the Marion Co., Medical Society ; and stood not only thus nominally but actually, in ability and professional worth, the acknowledged *leading* member of the profession in this county.

Dr. Norton was twice married, first to an *elder*, and afterwards to a *younger* daughter of Col H. Gorton, of Marion. The latter is left in her bereavement with a small family of interesting children.

Dr. Norton died with the prevailing epidemic of that period and locality—*Dysentery*, after an illness of about three weeks.

By his own request, a post mortem examination was held. The most important fact thus disclosed was ulceration and perforation of almost the entire colon and rectum to a most remarkable extent.

During an epidemic of the same disease the year previous, Dr. Norton had paid especial attention to the *diathesis* prevailing.—the result of which was the adoption of a mode of practice decidedly differing from that of his neighboring practitioners. It was that of a free and persevering use of *quinine*. And his associates and rivals bear uniform testimony to its unequalled success, In the next season the Doctor's own case was among the first that occurred, and predicating the treatment upon his opinions of the previous year, it consisted unfortunately, in the main, as we think, in the very free use of quinine with sometimes brandy. Two days before his death, he sent for an associate and myself to visit him, and we found him then taking, as he had for several successive days, an average of not less than five grains per hour of quinine ; and so strong was this mode of practice influencing his then diseased judgment, that he had suggested to his attendants a general *quinine bath*.

Whatever opinion may be formed of his judgment in his own case, his associates and neighbors will long regret the loss of one to whose skill, opinion and practice, they had habitually and satisfactorily deferred.

DR. EDMUND SMITH.

We have been kindly furnished with the necessary information in relation to our late associate, Dr. Smith, by Dr. Steele of Dayton, in accordance with the wish of the Montgomery County Medical Society. We have thrown together the facts furnished in our own manner, but often using the language of our correspondent.

Dr Smith was born at Smith Town, on Long Island, July 1st, 1816, and died at his residence, Dayton, O., August 15, 1851, and was therefore at the time of his death 35 years of age.

He came to Ohio in the year 1829, and graduated at the Miami University with much honor in 1835. He immediately entered with ardor and sincere devotion into a study of the medical profession, under the private tutorage of Prof. Alban G. Smith, of New York, whilst attending *three* full courses of Lectures in the "College of Physicians and Surgeons," in which institution he graduated in the spring of 1839. He received the highest testimonials and recommendations of the faculty.

He located in the city of Dayton in the fall of 1840, and there commenced and continued actively engaged in the practice of medicine until the very hour almost of his death. After a slight illness of a few days continuance of an intermitting character, during the intermissions of which he was still able to attend to his professional business, he suddenly fell into a profound stupor, from which, with all the appliances of the medical science, administered with the skill of almost the entire faculty in Dayton, he was unable to be aroused, and in a few hours the sleep of death stole upon him.

He became a member of the State Society at a late period (1850,) and was but moderately known to the profession over the State; but his immediate neighbors who knew him best, are unanimous in representing him to have been one of the brightest ornaments in the profession and in society. He was endeared to his brethren of the profession by his uniform urbanity of manners, courteous deportment, amiability and kindness of heart. He was respected for his scientific skill, and eminent professional qualifications and abilities. No one where he was known, possessed, in a greater degree, the love and esteem of the profession; and the gloom and sadness from his loss reaches every class of society where he was known.

In the summer of 1849, when the dreadful scourge, *cholera*, was desolating "cabin and castle," Dr. Smith was chosen by the city authorities to take charge of the Cholera Hospital, where, owing to his skill and unwearied vigilance, his success was very remarkable.

Possessed of a worldly competence, and therefore not dependent upon his profession for a support, he presents one of the rare instances of persons *commencing* and pursuing the *practice* of medicine from a pure *love for the science*. Under these circumstances, as a proof of his kindness of heart and enlarged sympathy with suffering humanity, it is enough to say, that the *poor* never applied for his

professional aid in vain. Where distress was found and assistance needed, he was ever ready to afford relief to the utmost of his professional skill and ability.

R. HILLS, *Chairman.*

[F.]

REPORT ON CHOLERA AND SHIP OR TYPHOID FEVER.

Dr. EDWARDS asked leave to present an abstract from the books of the Commercial Hospital and Lunatic Asylum of Cincinnati, in relation to the treatment of Cholera, and Ship or Typhoid Fever; and premised, by remarking, it was not his purpose to detain the Society by any lengthy remarks on the pathology of Cholera, but to give the results of treatment during the summer of 1851, in the Hospital. The first case occurred on the 29th of April, and the entire number treated was fifty-seven; forty were emigrants and boatmen attached to the river; eight cases originated in the house; the remainder from the city. As is usual in cases seeking hospital aid, a large majority of these cases were collapsed, or rapidly approximating that dangerous and hopeless condition. On examination of the books, an abstract of the condition of the patients at the time of admission was the following: Cases out of the house, the disease existed from twelve to twenty-four hours, before admission; and all except two cases were in partial or complete collapse; sixteen being entirely destitute of pulse, and in the remainder, pulse was scarcely perceptible; skin suffused and corrugated, extremities cold, freqent and copious rice-water discharges, tongue and breath cold, suppression of urine and cramps. The first seventeen cases received were treated with calomel, in various quantities, combined or not, as indications presented, with camphor, opium, quinine, and other stimulants. Thirteen of these died. The remaining forty cases were treated with strychnine and terebinth. alone, and twenty-eight recovered. Eight of these cases were recent, and thus more favorable; the remainder similar to the first seventeen. In every case in which the strychnine treatment was used early in the case, recovery ensued, except one, and he was an aged pauper.

In no case in which the strychnine treatment was persisted in, throughout the case, did any consecutive fever ensue, or fatal consecutive fever, yet six cases died after perfect re-action was induced by strychnine, these cases having subsequently been treated with calomel.

We found a dry skin, no matter how aggravated the other symptoms, always a favorable omen—patients sunk rapidly under free perspiration or leakage from the skin. We had, in every case, less perturbation of the bowels when calomel was not used.

Frictions to the extremities were objected to, as exhausting to the patients; those allowed to remain perfectly quiet recovered more rapidly and certainly than when frictions were long and frequently

used. An extensive application was Terebinth. and Cantharides, as in the formula below, applied by flannel to the epigastrium, and extremities, carefully watched to avoid its epispastic effect, as it frequently resulted in thirty minutes. The clothes should be removed and re-applied before this result is produced, as the discharge of serum from the blisters was exhausting and injurious.

Post mortems exhibited no organic lesions except in a few cases. Peyers glands were somewhat enlarged. The large venous trunks were in every instance filled with inspissated blood.

Two cases recovered that presented all the phenomena of collapse, and such as all admitted were not amenable to any heretofore known remedies.

The formula for external application is as follows: R‖ Spts. terebinth. o. j.; pulv. cantharides oz. j.; simmer ten minutes and apply by flannels.

In order that the Society may more fully understand the effects of this new combination, I will present an abstract of individual cases, to show the effects of treatment, and thus demonstrate the advantages in our hands, of this, over the heretofore strictly mercurial course. I will read the cases, and comment upon them as I proceed in order, and shall be most happy to hear remarks or answer questions from any member of the Society. My purpose is to give facts. Gentleman may draw their own conclusions. After these facts are detailed and cases reported, if the Society will give the time, I will give my views of the pathology of cholera, predicated upon the therapeutic results of this treatment, and shall be most happy to have those views carefully scrutinized, and disproved if they do not accord with sound pathology.

ABSTRACT OF CHOLERA CASES,

IN COMMERCIAL HOSPITAL AND LUNATIC ASYLUM, CINCINNATI, IN 1851.

April 29.—Dominick Solany; aged 26. Came in this morning about eight o'clock with Cholera Asiatica, collapsed; by steamboat from New Orleans; could learn nothing of his history. Died at 12 M.

April 29.—Michael Naughten, aged 42; gardener; from New Orleans, recently from Ireland; landed here 27th; taken yesterday with cholera, brought in this morning in collapse, features shrunken, skin cold, livid extremities and corrugated, pulseless, no secretion of urine. R‖ Brandy half oz. every half hour; R‖ cal. gr. j.; camphor gr. j.; pulv. val. grs. v. every hour; dry frictions. 5. P. M. has occasionally rice-water discharges. No perceptible change. R‖ Cont'd med. Died at night.

May 19.—Michael Boughten, aged 36; laborer. Sick since Wednesday last with pain in his legs, now has also pain in his head, knees, &c., complains of general weakness, pulse 100, natural in fullness, tongue coated, red at tip, bowels not open since yesterday, skin hot and dry. R‖ Calomel grs. x.; ex. col. m. xij.; R‖ neutral

mixture, grs. iij.; tart. antim. gr. j. m. half oz. every three hours. 20th. Bowels open freely. R‖ Cont'd. mixt. at night; has severe head-ache. R‖ Cupped nape of neck. 21st. Head-ache relieved, pulse frequent, bowels open, skin hot. R‖ Cal. grs. ij.; ipecac. gr. i. every three hours. 22d. R‖ Cont'd med. 23d. R‖ Cont'd med. 24th. R‖ Cont'd med. 25th. Tongue moist, pulse 96, small, slightly ptyalized, bowels moved once in the night. R‖ Neut. mixt. ozs. iij.; tart. ant. gr. i. m. half oz. every four hours. 26th. R‖ Cont'd mixt. 27th. Doing finely. R‖ Cont'd mixt. at longer intervals. 31st. Had slight chill yesterday. R‖ Quinine, grs. ij. every third hour. June 1. Rested. 7th. Gone to Convalescent ward. 8th. Taken last night with purging and vomiting rice-water; when first seen was pulseless, extremities cold. R‖ Cal. gr. j.; camphor grs. ij. every fifteen minutes; continued until 9th, on the morning of which he died. (A case of cholera supervening on ptyalism.)

May 26.—Charles Taylor, re-admitted; had been out five days. Tongue slightly coated, pulse natural, bowels loose, complains of some nausea. R‖ Cal. grs. v.; pulv. dov. grs. v. every six hours. 27th. Bowels open, tenderness in epigastric region; apply blister. 28th. Rest. During his convalescence he was attacked very violently with cholera, from which he recovered under the use of emulsion Gum Arabic ozs. viij; spts. terebinth drs. ij; strychnine. half gr. m. ½ oz. every fifteen hours. After recovery from cholera, diarrhea supervened and became chronic, under which he sank on the 17th July; having been in the Hospital twenty-one days. July 18. Post mortem, twenty-four hours after death; emaciated, no signs of peritoneal inflammation, lungs healthy, heart flabby, duodenal glands numerous and enlarged, jejenum healthy. In the lower part of ileum Peyers glands distinctly visible; inflammatory lesions in sigmoid flexure colon; rectum in a state of inflammatory hyperæmia with a few small ulcers; spleen enlarged, natural in texture; liver softened, containing inspissated bile in ducts. Second case occurring in Hospital, and not referable to error in diet or any appreciable exciting cause, and the first to whom the strychnine treatment was prescribed.

June 13.—Darbin Corbin, aged 32; laborer; brought in from watch-house with cholera, and rapidly collapsing. R‖ Brandy oz. j.; carb. ammon. drs. ij; tinc. myrrh; tinc. val.; ether sulph. a. a. drs. iij. syrup zingiber oz. j. m. take dr. j. every fifteen minutes, with frictions. 14th. Perfect re-action this morning, bowels checked, the medicine continued at longer intervals. 15th. Growing worse, bowels checked, sinking rapidly, continued medicine with brandy half oz. every hour. 16th. Died.

Remarks.—Had no discharge from 14th, which could materially have prostrated. Lesion of innervation destroyed this case, and not the quantity of fluids—a common incident in cholera, and one on which the strychnine is based.

William A. Milton, aged 51, seaman; has been seven years in

service of U. S., a greater part of that time as nurse and steward; taken at Memphis with a feeling of stupidity and loss of appetite; three days afterwards vomited freely, and occasionally since; great tenderness of epigastrium and yellowness of skin for three days. Taken yesterday with vomiting and purging rice water, pulse now small, extremities cold and corrugated; voice husky, urine suspended; swears he will not die either of Yellow Jack or Cholera. R‖ Blister epigastrium; R‖ strychnine half gr.; spts. terebinth. drs. ij.; muc. Gum Arabic ozs. viij. m. half oz. every hour. 14th. Slight re-action discharges biliary, urine small in quantity; medicine continued. 15th. Jaundice disappearing, feels better, pulse 92, skin warm; drop mixt. ice, and gum water. 16th. R‖ Medicine Cont'd. 17th. R‖ Med. Cont'd. 18th. R‖ Med. Cont'd. 19th. R‖ Med. Cont'd. 20th. R‖ Cont'd med. ter in diem. 21st and 22nd. Feels very well. Rested on 23d. Made a march on 7th July.

Aug. 5.—John Gannin, aged 26; laborer; came up the river, landed two days since from mail boat Telegraph. Had diarrhea and vomiting for a week. Stools were choleric, tongue and breath cold, extremities cold and shriveled, nails blue, eyes injected, skin livid, pulse barely perceptible, urine suspended, voice husky. R‖ strychnine ½ gr.; spts terebinth. drs. ij.; muc. Gum Arabic oz. viij. m. ½ gr. every half hour, mustard to epigastrium and extremities. In the evening his pulse had improved, his tongue and extremities somewhat warm; R‖ med. cont'd. 6th. Tongue coated at the edges, dry in centre, and warm; voice improved, head warm, face perspiring, extremities less livid and warmer, (passed urine in eleven hours after his admission,) urinated freely this morning, vomited twice last night, but not largely, has not purged since yesterday evening, then the discharge rice water; R‖ med. cont'd. 7th. Pulse full and strong, tongue coated slightly and inclined to dryness; bowels opened seven times; stools are of a dark greeninsh yellow color, watery; urinates freely; skin warm and moist; vomited twice last night, countenance and voice good. 8th. Suspended medicine, and gave iced mucilaginous drinks; bowels open eight times; stools watery, dirty yellow green, and is injured manifestly by drinks as they pass the bowels immediately; pulse full and strong, not frequent; tongue coated yellow. Epispastic 6in. by 6in. over epigastrium; R‖ tannin grs. v.; muc. half oz. every six hours. 9th. Better; had two discharges consistent and bilious, vomited once. R‖ Decoct. logwood. 10th. Pulse natural, tongue dry, skin warm. R‖ Neut. mixt. half oz. every three hours. 11th. R‖ Cont'd med., tongue cleaning. 12th. Rested, convalesced rapidly. This man took two grains and a half of strychnine and oz. j. terebinth. spts. in fifty hours.

HOSPITAL REPORT.

Cholera Asiatica, No. 1.

Names and birth place.—Mrs. White; came from Belfast, Ireland, in 1836.

Date.—July 6th, 1851.

Residence.—Sixth Street, No. —, between John and Smith.

Age and Constitution.—About 30, constitution delicate; then two weeks after parturition.

Habits.—Regular and active.

Predisposing and Exciting Causes.—Unknown.

Prominent Symptoms.—I was called at 1 o'clock, P. M.. and found her suffering from severe diarrhea and general prostration. The alvine discharges were frequent, copious, and of the rice water character. I gave calomel opi. and camph. together with enemas of Tannin and opi. Applied dry heat to the surface and sinapisms to the epigastrium.

Treatment in different stages.—At half past 2, found the patient much worse, medicine was not retained, vomiting and spasms in rapid succession, followed with cold surface, tongue and extremities, voice feeble, eyes sunken with apparent evidence of speedy dissolution.

Changed Treatment.—R℞ Strychnine gr. $\frac{1}{2}$; Ol. Terbenthina drms. ij.; Acacia ozs. viij.; gave tea-spoonful of the mixture every 15 minutes, continued the hot applications to the surface, gave ice freely, and for drink, a mint julep taken through a straw, which was well retained on the stomach.

Duration.—This treatment was retained for six hours when reaction was fully established.

Result.—She continued very low for nearly a week, during which time I gave very little medicine, sustaining the system principally on animal broths, &c.

General observations.—During the month following, I treated two other cases of less severity, on the same plan and with favorable results, and have never lost a patient *treated by this plan.*

No. 2.

Names and birth place.—Mrs. O'Connell; came from Ireland in 1824.

Date.—May 19, 1852.

Residence.—South east corner Third and John streets.

Age and Constitution.—Age about 53, constitution good.

Habits.—Regular and active.

Predisposing and Exciting causes.—Unknown.

Prominent symptoms.—Was taken in the morning early, with diarrhea and general prostration, vomiting and spasms followed, about noon became violent. I was called about 3 P. M.; rice water discharges, these were very copious, surface cold, spasms frequent, countenance sunken, voice sepulchral, tongue cold.

Treatment in different stages.—R‖ Ol. Terbenthina drms. ji.; Strychnine gr. ½; Muc. Acacia ozs. viij.; gave tea-spoonful of the mixture every 15 minutes; applied dry heat to the surface and extremities, with extensive sinapisms over the epigastrium. For drink gave mint water iced, in spoonful doses, as required.

Duration.—The symptoms continued for three hours, with less violence, when the purging ceased: but the spasms and vomiting occurred occasionally, until the next morning, although the patient was in a profuse perspiration. Gave two pills of calomel and opii. during the night, which were not retained on the stomach.

Result—Recovery.

General observations.—The patient had no secretion of urine for two days, or until the morning of the 22d, nor any discharge from the bowels until the 28th. The patient was of a full plethoric habit and enjoyed, for years, excellent health for her years.

No. 3.

Names and birth place.—Wm. Fey; from Ireland in 1845.

Date.—April 26th, 1852.

Residence.—Phœbe Street.

Age and Constitution.—Age 24 years, sound constitution.

Habits.—Temperate and regular.

Predisposing and Exciting causes.—Unknown. He worked at composition roofing.

Prominent symptoms.—Taken at 3 in the morning with severe diarrhea, followed by vomiting, spasms and general prostration. Saw him at 8 A. M., found him discharging rice-water in his bed unable to rise; surface and tongue cold, pulse barely perceptible, voice feeble, constant demand for water.

Treatment in different stages.—R‖ Strychnine, gr. ½; Ol. Terbenthina 2 drms.; Muc. Gum Acacia ozs. viij.; gave tea-spoonful every 15 minutes, allowed no drink, but a spoonful of pounded ice instead. Applied dry heat and an extensive sinapism over the epigastrium. The vomiting soon ceased; spasms became less frequent; the discharge from the bowels continued at intervals for three hours, when the surface became warm and they ceased altogether.

Duration.—Re-action was fully established in about 4 hours.

Result.—Recovery.

General observation.—The treatment was continued during the day, but gave medicine at longer intervals. A weak chicken broth was substituted for medicine on the day following, and he took nothing except the above mentioned treatment, and was able to leave his bed on the fourth day.

O. D. NORTON, M. D.

Cincinnati, April 26th, 1852.

No. 1.—July 7th, 1851.—George McGregor, Cholera; age 39.

I found him with usual symptoms of deep collapse, accompanied with complete aphonia; passing rice-water discharges involuntarily

from the bowels, and occasionally vomiting a fluid as limpid as water; pulse at the wrist, about 17 beats perceptible in a minute; he had been in this state about four hours previous to my seeing him; I considered the case a hopeless one, but determined to give a mixture of O. Terbenthina and Sulph. Strych. as recommended by Dr. Edwards, and ordered application of hot turpentine to abdomen and extremities. I saw him about four hours after he commenced this mixture, having taken a table-spoonful every twenty minutes; his pulse was about 80; vomiting and stools had stopped, and he presented all the appearance of convalescence; he was walking about on the third day after.

No. 2.—July 13th, 1851.—Mary Heims, age 43.

Found her with cramps, vomiting, and rice-water discharges; pulse about 48, and very weak; ordered the mixture of Strych. and Terbenthina with mustard to abdomen, and friction to lower extremities; after using the mixture for three hours all bad symptoms disappeared and diarrhea ceased; she was attending her regular duties in forty-eight hours after.

No. 3, was a case of collapse, and like No. 1, with the aphonia not so complete; the same treatment was successful.

DR. COHEN'S Cases

By request, Dr. Edwards gave his rationale of the modus operandi of Strychnine in cholera. He remarked, Strychnine is now regarded as a nervous stimulant and astringent. Its bitterness is excessive, and its effects on the vascular system of animals killed by it is *invariably* to contract the diameter of the arteries; soo much so that the aorta of a common-sized dog, after death from Strychnine, was found, by Dr. A. T. Thompson, no larger than a crow quill. This is a *universal result*. We give Strychnine in cases of Hemiplegia and Paraplegia, without cerebral or spinal disturbance or lesion, with almost certain success. In other words, it is indicated, where you have disturbed innervation or want of nervous energy, from loss of functional action of the nerves of the affected parts. These premises being admitted, we reason—a partial paralysis of the great sympathetic or nerves of organic life, controlling digestion, assimilation, respiration, circulation, secretion and excretion, together with a patulous condition of the exhalent vessels to constitute cholera. Why is Strychnine indicated in its cure? We all know the function of the liver and kidneys is suspended. We know that no other than serous rice-water discharges are found; and we know, moreover, when the secretions of the liver and kidneys are restored, we have most anxiously expected results; and are tolerably confident of success. These results follow in every case successfully treated by any remedial agent, and no case of cholera ever can, or ever will be cured, unless these two important functions are restored. These functions, when ordinarily suspended, particularly that of the liver, are restored by calomel, yet it must needs be slow; hours and days pass before the full therapeutic effect is exhibited. Time cannot, in cholera, [illegible]

culated on. It runs its course from two to twenty-four hours, or if death does not ensue in that period, the serous portion of the blood has been discharged, and the remaining fluids are so inspissated as to be incapable of capillary viobility. Moreover, many cases terminate fatally where the discharges from the system were not greater in admeasurement than could have been borne by the patient by direct abstraction of blood. How do you account for these cases, unless you do it on the ground of nervous lesion or paralysis? How often have our hopes been prostrated after our patients have passed twenty-four hours without a discharge from the bowels, by finding them sink, swoon and die, without any other rational cause, than the primary infringement of the cause of cholera, on these great centers of innervation. Calomel, the most *permanent* of all stimulants, cannot act on the liver, kidneys, or any other organ, to excite their functional duties, without first calling into activity, excitability, contractictility, sensibility. The parenchyma and vessels secreting, are under the control of these nerves, and you cannot hope to arouse these secretions, other than by arousing the organic sensibility, resident in the nervous centers. The diseased secretions are the evidence that the vigilance and control of these nerves is lost, and he who hopes to correct or stay these secretions, by merely stopping the serous flow, or diseased secretions, is very far from safety in his treatment. Unless healthy secretion take the place of the diseased, your patient is never safe, and unless you can arouse that healthy secretion through the nervous system, by some agent more potential and speedy than calomel, you cannot safely treat disease that runs its course in four hours. I have seen cholera in every State in the Union, from Maine to New Orleans, and in Canada. Four years since, I visited, by order of the Government, the Marine Hospitals, and during that period found cholera everywhere. I aided in sixteen dissections in New Orleans, four in New York, and many in the Hospital here, and never, in any instance, could my knife detect this nervous lesion; yet without it, no man can rationally account for the most simple phenomena of cholera. We all know we have nervous apoplexy, if you will allow me the expression, or that condition similating apoplexy in its symptoms, and yet no cerebral lesion or effusion visible after death. It would be as unreasonable to say there was no nervous lesion in one case as in the other, because the skill of the dissector could not exhibit it in either. Now, how does Stryehnine act in cholera, or as my pathology has it, in paralysis of the nerves of organic life? Why, precisely as it does in paralysis of the nerves of animal life—the life of relation. The cerebro spinal nerves stimulate them to the performance of their functions, first restoring sensibility, then motion, then health. In from half an hour to four hours in every case of cholera cured by Strychnine, we find a suspension of the rice-water discharge, and a flow of bile follows; this is accompanied with urinary flow, and leakage from the skin ceases—the breath and tongue become warm, and animal temperature is restored.

These phenomena are the peculiar province of these nerves. Then paralysis brought diseased secretions or leakage from the patulous mouths of vessels of the bowels and skin. Their restoration to the duty of innervation suspends these by setting up the healthy functions. The combination with the Spts. Terebinth. renders the mixture more readily retained, and the mucilage is a proper vehicle. Few ever reject the medicine, and the only precaution we enjoin, is not to allow the patient the erect posture and give the medicine to the minute. I have never seen one refuse, but invariably they are importunate for the time to return, many alleging the apparent electrical effects of the combination; feeling it, as they say, to the tips of the fingers and toes. Where there is great prostration, we sometimes give a table-spoonful of Aqua Camphor every half hour, with the mixture.

The Doctor asked the severest scrutiny of his pathology of cholara, and demanded a generous professional confidence in the detailed cases, as he was present at the bed-side, and watched the results here detailed. He had tried mercurials and diffusible stimulants in the first seventeen cases, and had lost thirteen, and was about to despair, when the treatment by Strychnine was instituted. During the continuance of his attendance on the Hospital, he had written to nearly one hundred physicians on business, or had answered interrogatories from that number, and he alleged no part of his professional life had afforded him more pleasure than the response of some thirty of these friends, that the treatment had been eminently successful in their hands. And during this summer, six physicians in Cincinnati, had tried this treatment, one of them in eleven cases, with invariable success, the others in two, three, and four cases. He would subjoin, with his Hospital cases, reports from Drs. Norton and Cohen, who kindly favored him with the reports.

If he had not made himself entirely intelligible, he was ready to answer any questions, and closed by saying, so deep and abiding was his confidence in the treatment, that if attacked with cholera, he would take the remedy.

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REPORT ON TYPHOID OR SHIP FEVER.

Dr. Edwards asked leave to present an abstract from the books of the Commercial Hospital and Lunatic Asylum of Cincinnati, in relation to the treatment of Typhoid or Ship Fever, by cold water injections and warm baths; and premised by stating that, during the entire winter, many cases were received, and variously treated; but the number greatly increased during the Spring. Between the 10th of March and 20th of April, 1852, the number admitted was one hundred and twenty-six, and fifteen cases originated in the Hospital. Three of the nurses were prostrate at one time, and one died. Of the number admitted during this period, and originating in the house,

six died. The disease generally ran its course, in from one to twenty-four days; convalescence seldom taking place until the end of the third week, and occasionally protracted to the fourth. About thirty of these cases were treated with cold water injections and neutral mixture. The water used was cold; when the warm weather advanced, ice was added. Of the thirty cases thus treated, one died, and his case had been under treatment two weeks before admission. The lesions upon post mortem were entirely enteric in those who died early in this disease, those at later periods had cerebral complications.

Lawrence Harman, age 30; Laborer.

March 29.—Sick four months; taken with a chill, which was followed by pain in his head and bones: pulse now, 120, small; tongue dry, (very,) covered by dark brown scales, and moist at edges; sordes about teeth; bowels not moved since day before yesterday evening; intellect clouded; cheeks flushed. R‖ Cold water injection and mush diet.

March 30.—Slept well; pulse 110; tongue dry in center, moist at edges; bowels moved once; skin hot, inclined to perspire. R‖ Cont'd injection and diet.

March 31.—Tongue moistening; pulse abating in frequency; brain still disturbed; bowels regular. R‖ Cont'd injection and diet.

April 1.—Pulse 95, small; bowels regular; tongue moist; sleeps well; still talks incoherently. R‖ Cont'd med.

April 2.—Pulse 100, small; tongue moist, covered by a dirty brown fur; bowels moved twice. ‖R Cont'd med.

April 4.—Sleeps well; tongue moistening; pulse nearly natural; skin hot and dry; bowels regular. R‖ Cont'd injection.

April 5.—Pulse 110, soft; slept well; tongue very dry; bowels opened once. R‖Cont'd injection.

April 6.—Pulse 100; tongue moist; bowels regular. R‖ Neut. Mixt. oz. s. s. every three hours.

April 7.—Tongue nearly dry; circulation improving; bowels moved twice. R‖ Cold water injection, ter in die, and R‖ Cont'd injection. April 11.—Rest. April 16.—Discharged.

John Nail, age 19; Tailor.

April 2.—Sick five days; taken with pain in the head and a feeling of weakness; pulse 110, quick; tongue dry, coated yellow: skin hot and dry; bowels rather loose. R‖ Pulv. Dov. grs. x noct. and R‖ Neut. mixt. oz. s s every three hours.

April 3.—Bowels opened once; pulse more tranquil. R‖ Cal. grs. v. Ext. Hyoc. grs. ij. m. ft. pill, now.

April 4.—Tongue dry; skin hot and dry; bowels moved four times last night. R‖ Neut. mixt oz. s s every three hours, and Pulv. Dov. grs. v at night.

April 4.—Sleeps well; pulse 100; tongue dry and red; bowels not moved for twenty-four hours; teeth covered with sordes. R‖ Pot. Bitart. drchm. j. Neut. mixt. oz. s s m. every three hours.

April 6.—Pulse 110; tongue dry; bowels moved last night. R‖ Hg. C. Creta grs. iij. P. Dov. grs. v. m. every two hours.

April 7.—Petechiæ covering abdomen and chest; pulse small and frequent; bowels moved six times. R‖ Plumbi Acet. scrp. j. water oz. iiij. m. ft. injections, and R‖ Neut. mixt. oz. s s every three hours.

April 8.—Tongue red and dry; skin above natural temperature; pulse 90, full. R‖ Hg. C. Creta grs. v. ter in die.

April 9.—Tongue rather dry; bowels moved five times. R‖ Neut. mixt. oz. s s Ipecac. $\frac{1}{4}$ gr. m. every three hours. Bowels to be restrained by Tannin injections.

April 10.—Tongue dry; pulse somewhat excited; bowels moved once; skin harsh. R‖ Cont'd medicine, and R‖ Cold water injection bis in die.

April 11.—Pulse 95; skin and tongue both dry. R‖ Cont'd med.

April 12.—Rests badly; pulse 100; tongue dry and red; bowels moved once. R‖ Cont'd injection.

April 13.—Looks better and feels better; circulation good; tongue moist; bowels regular. R‖ Cont'd medicine.

April 14.—Bowels loose; pulse 95; tongue dry; skin hot. R‖ Hg. C. Creta. P. Dov. a a grs. v. every four hours, alternating with Neut. mixt. oz. s s.

April 15.—Seems to be improving. R‖ Cont'd med. and warm bath.

April 16.—Bowels not open for five days; tongue dry; pulse improving. R‖ Ol. Ricini oz. j. now.

April 17.—R‖ Resumed Neut. mixt. and cold water injections.

April 30.—Discharged.

Michael Faulkner, age 33; Laborer.

April 9.—Sick nine days; taken with a chill, which was followed by universal pains. Pulse 95, full and strong; bowels inclined to torpidity; tongue dry in center, moist at tip. R‖ Bleed xij oz. R‖ Cal. grs. x. Ext. Hyoc. grs. iij m. now.

April 10.—Slept well, and feels better; bowels open ter noctis; pulse 90, reduced in force; tongue black and dry. R‖ Neut. mixt. oz. s s. Ant. Tart. gr. $\frac{1}{8}$ every three hours.

April 11.—Entire trunk covered with petechiæ; pulse 120; tongue dry; bowels regular. R‖ Cont'd med. and give cold water injection; iced gum water for drink.

April 12.—Pulse 110, quick; bowels not moved for four days; tongue parched; urine scanty. R‖ Cal. P. Dov. a a grs. iij. m. every four hours, alternating with Neut. Mixt. oz. s s. Ant. Tart. gr. $\frac{1}{8}$ m.

April 13.—Was very sick; pulse 100; tongue red and dry; bowels not moved yet. R‖ Ol. Ricini oz. j.; Terebinth. grs x, m. now.

April 14.—Pulse 90, soft and full; tongue moist; bowels moved once; stool passed involuntarily. R‖ Neut. mixt. oz. s s every three hours, and cold water injections ter in die.

April 15.—Tongue dry in center, moist at tip and edges; pulse natural; bowels regular. R‖ Cont'd cold water injection.

April 16.—Abdomen tender; pulse soft and full; tongue dry and red. R‖ Cups to abdomen and cont'd injection.

April 17.—Improving. 20.—Rest. May 3.—Discharged.

George Stranger, age 24; Carpenter.

April 15.—Sick three days; taken with chill, followed by fever, has diarrhea now; stools thin and green; pulse excited; tongue moist, covered with a thick white crust; skin hot. R‖ Cal. grs. v. P. Dov. grs. x m. noct.

April 16.—Cont'd med. ter in die and warm bath.

April 17.—Tongue clearing off; bowels loose; pulse soft; skin moist. R‖ Morphia gr. j. Muc. oz. ij. m. ft. injection and repeat if required.

April 18.—Abdomen tender; bowels loose; stools bloody; pulse 95; tongue moist. R‖ Cont'd injections and applied dry cups over abdomen.

April 19.—Tongue dry and coated. R‖ Hg. C. Creta; P. Dov. a a grs. v, m. every six hours, and continue cold water injections.

April 20.—Bowels moved bis in nocte. R‖ Cont'd med. and apply dry cups over abdomen.

April 21.—Bowels moved bis in nocte. R‖ Hg. C. Creta. P. Dov. a a grs. v; Quinine grs. iiij m. every four hours.

April 22.—Bowels generally moved four times during every 24 hours. R‖ Decoction Logwood oz. j. April 22.—Rest. April 27.—Discharged.

Arnold McDonald, Laborer.

April 16.—Sick one week; taken with nausea, vomiting and headache; tongue dry, red and cracked; bowels moved twice last night by medicine, but were previously constipated; skin hot and dry. R‖ Neut. mixt. oz. s s every three hours. R‖ Cold water injections ter in die, and warm bath in evening.

April 17.—Pulse 100, full; tongue moist at edges, dry in center; bowels opened twice in the night. R‖ Cont'd med.

April 18.—Pulse 100, full: tongue moistening; bowels moved twice in the night. R‖ Cont'd med.

April 19.—Tongue dry, red, cracked and coated; pulse 85, strong and full. R‖ Hg. C. Creta grs. v ter in die. R‖ Cont'd med.

April 20—R‖ Neut mixt. gr. oz. s s every three hours, and cold water injections ter in die.

May 4.—R‖ Continued Medicine.

" 5.—R‖ Quinine grs. ij. Pot Nit. grs. iij. every three hours.

" 7.—R‖ Cont'd med. 14.—Rest. 20.—Well.

[H.]

ON THE SPECIFIC IDENTITY OF TYPHUS AND TYPHOID FEVERS.

BY J. S. NEWBERRY, M. D., CLEVELAND, OHIO.

It was my fortune to begin my medical life during the prevalence of an extensive epidemic of Typhoid Fever, at and in the vicinity of the locality where I made my *debut*. My first appreciation of the cares, anxieties, and responsibilities of a medical practitioner was derived from cases of this terrible disease.

I had come fresh from the schools, my memory burdened with a long catalogue of symptoms and remedies; with a vague notion—common, I believe, to young physicians, that my cases would come to my hand stamped with the unmistakeable impress of the peculiar disease—in some sort labelled, each with its appropriate name; that when the diagnosis was determined, I had but to remember and follow out the prescribed routine of practice.

You will readily imagine, that in the ever-varying phases of typhoid fever—so different in different cases, and at different stages of progress—with the inherent obscurity of the disease, I was early taught the all-important lesson, that the physician's duty is far less to treat names than symptons.

Among those attacked by typhoid fever, in the epidemic to which I have alluded—that of Summit county, Ohio, during the years 1847–'48 and '49, were some of my dearest friends and relatives; who, despite the care and counsel of some of the best medical talent in the State, fell victims to its relentless virulence.

The sad history of these cases, the obscure and mysterious nature of the malady—rendering powerless the hands of the most skillful physicians, and setting at defiance the most potent therapeutic agents—conspired to throw around the subject, in my mind, a strong but melancholy interest:—an interest which has since led me to study, with some care, the literature of the subject, and has inclined me to careful examination of the cases which have come under my observation.

This interest which has made typhoid fever a sort of *specialite* with me, and the great diversity of opinion which I know to exist among the members of this Society, in reference to the diagnosis of this disease—must be my apology for bringing before you a subject with which you are already so familiar.

One result of my investigations of the history and phenomena of typhoid fever, has been the conviction that the different shades of disease, known under the name of typhus and typhoid fevers in Europe and America, *are specifically identical*, differing only as more or less marked varieties of the same species. This view of the subject, with the facts which seem to me to sustain it, I now propose to submit to your judgment.

In order to present, as briefly as may be, the proof of the identity

of these generally considered distinct diseases, I shall avoid al unnecessary details of their history, symptoms, pathology and treatment, and only call your attention to their principal coincidences and differences; that from this comparison of facts—supposing them to be fairly and honestly reported—you may decide whether each should continue to maintain a distinct existence, or whether, by the same laws of generalization which have brought under one name all the grades of scarletina and rubeola, they should not be considered one and inseparable.

Leaving out of view the imperfect descriptions, and vague diagnoses of the earlier writers, whose labors were not illumined by the light of modern internal pathology—by *typhoid fever*, I would be understood to mean the *typhoid* or *winter fever* of the United States generally, *typhus fever* of New England, *typhus fever* of Dr. Nathan Smith's *typhoid fever*, or *affection*, of Louis and Chomel, *dothinenteritis* of Bretonneau, *gastero-enteritis* of Broussais, *folicular enteritis* of Bouillaud, *abdominal typhus, nervous fever*, &c., of the Germans, *continued fever*, &c., of English writers.

There are still some who deny the identity of our ashenic fevers, with the typhus fever of New England, and typhoid fever of Paris. Of this identity there can be no reasonable doubt. Jackson, Hale, Bartlett, and Bigelow, have, I think, established this point clearly; the examination of a large number of cases, has led me to the same conclusion.

In speaking of *typhus* fever—I mean the disease called *typhus* in the Scotch and Irish Hospital Reports—*typhus fever* of Dr. Gerhard, of Philadelphia, *contagious typhus* of Hildenbrand, *contagious typhus of Mayence, hospital, jail, camp, spotted petechial*, and *malignant* fevers of authors.

The principal authorities, which I have consulted, in reference to the history and phenomena of *typhoid* fever, are the writings of Roederer and Wagler, Huxham, Pinel, Andral, Cruveilhier, Gendron, Sarcone, Baglivi, Petit, and Chomel, among European medical writers; of Drs. Nathan Smith, Jackson, Hale, Bigelow, Gerhard, Bartlett, Sill, &c., in our own country.

In reference to typhus fever, I have been mainly guided by the descriptions of Cullen, Huxham, Boerhaave, Graves and Stoke, Cheyne, Hildenbrand, Frank, Rasori, Stewart, Armstrong, Watson, Smith, Gaultier de Claubry, Montault and Landouzy.

I should also say, that my opinion has been influenced by personal observation of cases in different parts of the United States and Europe.

In order to a just comparison between these so-called different diseases, permit me to present you with a brief analysis of the symptoms, organic lesions, the march and period, etiology and treatment of both, that we may, if possible, fix upon their precise points of coincidence and difference.

NOMENCLATURE.

The first thing which strikes one, in drawing a comparison between these different phases of disease, is the great number of names common to both, names which, generally discriptive of nature or habitat, are prima facie evidence of, at least *great similarity*.

SYMPTOMS.

The differences of the symptoms are *very slight*; indeed, the best European authorities who have made this diagnosis a matter of close examination, both those who believe in their unity, and those who maintain their duality, agree in representing them as scarcely appreciable, and as affording no certain diagnostic test.

Dr. Wood, of Philadelphia, asserts, indeed, that many cases of his Enteric, (Typhoid,) Fever run through their entire course, without presenting *any symptoms analagous* to those of typhus fever; but I am sure, few present will subscribe to that statement; and certainly, among *recorded* opinions, *his* stands most unenviably alone. Among the symptoms which have been cited as diagnostic and characteristic of typhus, are the following—and it is not a little singular that most of them have been considered by different authors, as peculiar to, and distinctive of, *typhoid* fever.

The early appearance of severe stupor and typhomania—eruptions upon the limbs and trunk, or petechiæ, formed by subcutaneous hemorrhage.

Gerhard on the contrary, considers the petechiæ, a more constant characteristic of the typhus of Philadelphia.

Diarrhea has been urged by Bartlett and others, as a constant symptom of typhoid, and almost never present in typhus fever.

A feted ammoniacal odor, compared to that of decaying straw, with the frequency of gangrene, carbuncle and inflammations of the parotids, have been thought, by some medical men, to be peculiar to typhus. We find, however, all these symptoms occurring in typhoid fever, some of them its constant attendants.

Gaultier, Monneret, and other authors, tell us that the *premonitory* symptoms of typhus and typhoid fevers, are perfectly identical in character; while in the course of the attack, we have the same constant headache, either dull or darting; or less constant delirium, with all its varieties of form, intensity, and tone; epistaxis occurring about the same period; a rose colored eruption peculiar to these two forms of diseases, petechiæ, sudamina, gangrene, of frequent occurrence in parts of the body exposed to pressure, and in accidental wounds, echymoses, and inflammations of the parotid glands; a pulse which despite an appearance of force at first, becomes rapidly feeble and compressible; somnolence, coma, a putrid odor, tenderness of the bowels, meteorism, diarrhea, sibilant and sub-mucous ronchus, subsultus tendinum, hemorrhage from the bowels; all are common to the two forms of disease under consideration.

This catalogue of symptoms, which is authenticated by the high-

est authorities, could be so far extended as to leave to typhoid fever, in its symptomatology, *nothing but a somewhat graver form of common symptoms.*

FORM, PROGRESS, AND PERIOD.

The various forms of *typhoid* fever, the adynamic, ataxic, inflammatory, bilious, and mucous, or according to the german classification of the disease; the nervous, pectoral, and abdominal forms, are as distinctly marked in *typhus* fever.

The mode of progress, as well as the relative character of the successive stages, are alike in both.

The duration of *typhus* is, however, rarely over three weeks; cases of *typhoid* fever frequently run much longer.

In regard to the duration, as in regard to the intensity and mortality of each form, there is great variation, in differeut cases and different epidemics; but it seems well established that *typhus* is the graver disease, as indicated by the greater mortality, and the earlier and more complete prostration of the vital powers. Still, in every important epidemic of *typhoid* fever, cases occur which precisely correspond in these respects, with the prevailing type of the typhus gravior.

The *typhoid* fever of ships, jails, &c., has all the malignancy, rapidity, and mortality, ascribed to *typhus;* from which in such circumstances it cannot be distinguished, simply, as I contend, because it is *the same disease.* When, as often happens, it radiates from such sources, into the country, in a purer and more healthful atmosphere, it loses its malignancy, assumes a milder and more protracted form, and becomes *typhoid* fever.

PATHOLOGICAL ANATOMY.

In default of external characters by which these two forms of disease could be distinguished, or rather decided to be distinct, their organic lesions have been regarded as affording the only true ground of diagnosis.

To say nothing of the organic changes, which are proved, by the best of authorities, to be common to the two forms of fever; the ulceration of Peyer's plates, has been asserted to be a lesion, peculiar to *typhoid* fever, and as such the great and all sufficient diagnostic. Yet we have the testimony of Drs. Gerhard and Stone, in this country, and of Ardy, Pellerin, Landouzy, and others, in Europe, that this lesion *does* occur in *typhus* fever. Moreover, we have credible testimony that well marked cases of typhoid fever, have occurred in which this intestinal ulceration was not present.

It was present in all the cases reported by Louis, and in all the post mortem examinations made by Chomel, during 5 years; yet Chomel says, in some of his cases, the alteration was exceedingly slight, a small portion of only a single plate being involved, and that not ulcerated; an amount of organic lesion, which showed itself to be a scarcely appreciable element in the cause of death.

It should be also borne in mind, that although nearly all the autopsies made in Paris, exhibited intestinal ulceration, we have reason to believe that it is less constant elsewhere.

The testimony of Dr. Lombard, of Geneva, would seem to indicate, that this lesion was a less constant attendant on typhoid fever in England, than in France. He was familiar with the symptoms of typhoid fever as occurring on the continent, but failed to find a lesion of Peyer's plates, constantly associated with them in Great Britain. He was either mistaken in his diagnoses, which could hardly be possible, unless he found himself unable to detect the differences between typhus and typhoid fevers, or typhoid fever had not there its characteristic intestinal lesion.

It is not to be denied, however, nor would I wish to deny, that a change in Peyer's plates is a phenomenon of more constant occurrence in *typhoid* than in *typhus* fever; but is is common to both, and is not absolutely constant in either, and thus becomes a bond of specific unity. For the purpose of escaping the community of character involved in the existence of the intestinal lesion in both *typhus* and *typhoid* fevers, it has been ingeniously suggested that there are three forms of typhus fever. 1st—The *typhoid* fever of Louis. 2nd—*Jail* and *camp* fever of the European Continent, which may, it is said, be identical with the first. 3d—True *typhus*, the typhus of the English, which by the terms of definition used, is made to include all such cases of asthenic fever, *as do not exhibit intestinal ulcerations*,

This negative definition will hardly satisfy any intelligent mind, and in fact this classification is rejected by nearly all European nosologists.

ETIOLOGY.

The common causes of *typhus* fever are, unquestionably, infection and contagion. Such is the concurrent testimony of all writers on the subject. That *typhoid* fever is also distinctly contagious, I presume no one present, who has seen cases of the disease, entertains a doubt; the evidence on that point is perfectly conclusive.

An exemption from second attacks, is a rule of general application in both forms of disease; yet a rule to which exceptions are met with in each.

Dr. Bartlett has inferred the non-identity of *typhus* and *typhoid* fever, from the occurrence of cases of *typhoid* fever, which had before suffered an attack of *typhus*. I could cite an equal number of cases where typhoid fever, contrary to its general rule, had attacked twice the same individual.

TREATMENT.

The treatment of the two forms of disease under consideration—and by treatment, I mean the results of treatment—the effect of remedies—affords no ground for diagnosis between them. The treatment of either form must vary with the *case*, the *epidemic*, the

stage of progress, the *local determination*, &c., the great indications to be fulfilled in each, being, as has been well said, "to prevent death."

The same symptoms to meet, the same issues to fear, the same, or nearly the same pathological conditions on which to base prescription—the treatment must be in general terms the same. It is true, however, that the prostration of vital energy is greatest in most cases of typhus fever; and here, as in the more malignant cases of *typhoid* fever, the system requires vigorous support. Still in this, as in all other characteristics of typhus, there is nothing, as I contend, which should carry it beyond the limits of a variety. Cases have occurred under my own observation, in connection with an epidemic of typhoid fever, which had all the characterics of the severer form; cases which, if they had been isolated, would have been called typical cases of *typhus* fever, and I could not doubt their being mere varieties of the prevailing epidemic.

It will be remembered that I do not claim perfect identity in all details between the graver and milder typhus; there seem to be differences, which, although, as we have seen, sufficing for the formation of a *variety*, are not, in the logical sense of the term, *essential*.

These diseases vary so much in different cases, and in different epidemics—they interchange so frequently their leading symptoms —so intertwine their roots and branches, that they cannot be torn asunder, nor severed by the knife of diagnosis, and each be left in its integrity.

The other members of the family of *exanthemeta*, the natural congeners of the forms of disease under consideration, are subject to even greater variation; and yet these variations are not thought to deserve the name of species. Are there greater differences between typhus gravior and mitior than between scarlatena simplex and scarletina maligna?—or simple rubeola, and rubeola sine catarrho on the one hand, and rubeola nigra on the other?

The parallelism between these cases is complete, except that there is perhaps greater variation from the typical form in both these diseases, than in all the different phases of *typhus* and *typhoid* fever.

There is also this point of resemblance between the variations of rubeola, scarletina, and typhus, that they occur not only as isolated cases, but (and more frequently) as epidemics; and these epidemics differ from each other so much in symptoms and lesions, that were it not that all the varieties run into each other—exceptional cases of one epidemic corresponding so precisely with the typical cases of another, these varieties would have been elevated to the rank of species.

In concluding this exceedingly brief view of the subject, which could only be fully discussed in a good sized volume, I would say hat the weight of modern authority is rather in favor of uniting the wo diseases under one name.

Since the natural history of disease has been made the matter of *scientific study*, and the principles of medicine have acquired a degree of exactness which has given to this branch of human knowledge a high and honorable place among the sciences, many of the shadowy phantoms of the past walk the earth no more. And while I would hardly call typhus fever a phantom, there is no disguising the fact, that when sought with all the lights of modern diagnosis, that aggregate of phenomena, described under this name by the older writers, as a thing distinct and tangible, has become exceedingly rare, being far oftener present to the imagination than vision of the medical practitioner of the present day.

In Europe, the weight of testimony is decidedly in favor of regarding both forms of diseases, of which I have spoken, as specifically identical. In France, where diognosis is a matter of greater scien ı-fic accuracy than in any other country—either they have but *one* of these diseases, or both are united under *one name*, since typhus fever does not exist there as a distinct disease. *Typhoid fever*, however, prevails extensively in France, presenting the same phenomena, in type and varieties, with the typhoid fever of New England and the West. In England both varieties occur, and the British medical men are generally agreed in considering the two diseases identical.

It seems scarcely probable that an entirely distinct contagious disease should perpetually and extensively prevail in England, and never be transported across the Channel; which is but twenty-two miles wide at the point of most constant communication.

It seems a more philosophical view of the case, to suppose that the *filth* and *destitution* of the lower classes of the British population, matters in which they differ greatly from the inhabitants of the continent, with other local causes, have given to a disease common to the two countries, a more malignant, rapid, putrescent character.

In our own country—since *we* no more than the French have typhus fever prevailing epidemically or periodically among us—we have been, for the most part, compelled to take as our guide in this diagnosis, not our own eyes, but the opinions of those who have studied imported cases, and those originating from them.

The three principal writers on this subject in this country, Bartlett, Wood and Gerhard, are agreed in considering the two varieties of disease as specifically distinct. Bartlett especially has labored the point of their duality so strenuously, that it might perhaps be expected I should devote more time to his facts and arguments than I have done. But I have failed to feel the full force of his assertion, that he was better situated to make a decision of this vexed question, than the nosologists of continental or insular Europe. For this reason I have not felt called upon to give to him more space than to others whose reports of cases are more extensive, and whose conclusions—whether sustaining or opposing the opinions I have expressed—have been advanced with more caution and honesty than his.

My own observation does not sanction the result of the tabular comparison which he makes between the two forms of disease; and any one who reads his quotations of Gaultier de Claubry, Armstrong, Southwood Smith, Landouzy, etc.—and especially if he will read the entire articles from which the quotations are made—will hardly fail to feel, that he has not fairly reported the testimony in his conclusions, and that he was more anxious to establish a proposition, than elicit truth, by his efforts. I am confident that any one who will examine the literature of the subject, or has had opportunity of examining these diseases at the bedside of the sick, will agree with me in saying, that typhus and typhoid fevers are far more intimately connected than Bartlett would have us believe; and I shall be surprised if all such do not still further agree with me in regarding them as specifically identical.

[I.]

REPORT ON OBTETRICS.

To the State Medical Society:

Gentlemen—Your Committee on Obstetrics respectfully report:

In contemplating the progress and improvements in this department of Surgical literature, your committee almost involuntarily found their minds turned in the retrospect to the origin of the art.

The science of Obstetrics must have had an existence commensurate with the first family; and at this day, it is one of the most important branches in medicine, comprehending all that is known, and all that concerns the reproduction of our species.

In the first history of the healing art, as far as we have been able to discover in ancient medical literature, females were intrusted with the care and management of women in their accouchements.

After men began to study anatomy, and became a little acquainted with the anatomical peculiarities and structure of the female pelvis, the necessary and proper evolutions of the fetus, in order to a safe delivery, they often gave directions and sometimes assisted, in cases of difficult labor; but the "wise women" or "sage sfemmes," as the midwives were designated in those days, were the common attendants on lying-in women.

Rachel, the wife of Jacob, one of the ancient patriarchs, who died in childbed, was attended by one of these "sages;" and Tamor, with her twins, was waited on by one of the same class.

St. Jerome says, "that the *holy virgin* had no sage femme to assist her in her labor; we have no intelligence aside from that authentic account, which is found in the sacred volume, of the transaction of this interesting and very important advent; which says, "that she brought forth her first-born son, and wrapped him in swaddling clothes, and laid him in a manger."

In the time of the Hebrew bondage in Egppt, in the reign of

Pharoah, some 1,600 years before the Christian era, we are informed that this prince issued an edict to the midwives to "destroy all the male children of the Hebrews;" and some authors suppose that he caused directions to be given them as to the manner of dividing the cord, to effect this object; but the prominent command of the King was "to cast them into the river."

Hippocrates, who lived about 400 years before the Christian era, speaks of the sages femmes of his day.

Diogenes mentions that the mother of Socrates was a noted sage femme.

Aristotle, the younger Pliny, and some other ancient writers on tokology, express a wish "that the sages femmes might be particularly careful and skillful in the manner of dividing the cord."

If antiquity presents us no renowned accoucheurs, it does not prove that the physicians were ignorant of the obstetrical art; for we discover that Hippocrates himself was fully aware of many of the difficulties sometimes to be encountered in delivery. He was aware "that the child could only present itself in the straits by the head, the pelvis, the lower extremities, or the trunk," and "that it was necessary, when the child presented transversely, to turn and get the head; aware of the danger of delivery by the feet, he preferred to bring down the head rather than subject the fetus to a probability of strangulation by pressure on the cord." He also mentions "the arm presentation, of replacing it back into the womb, or amputating it." He also mentions the operation of embryotomy; of delivering the placenta, and bandaging the abdomen, etc.

These ideas and suggestions (though some of them imperfect) made in that day, showed clearly that the physicians were not ignorant of the obstetrical art.

It may appear somewhat strange to us, in this day of progress and scientific improvement, to find that the obstetrical art should have remained for so long a period without any noted improvement. It remained nearly as Hippocrates left it, for the space of 2,000 years, though he was followed by a Galen, a Celsus, and many other men of strong minds, learning and medical abilities; yet it remained in this condition until about the middle of the sixteenth century; though many authors had written upon the subject in Egypt, in Arabia, in Germany, and also in Italy, without adding but very few ideas thereto in the way of improvements.

About this time, lying-in wards were opened in the Hotel-Dieu, in the city of Paris, where opportunities were afforded of witnessing all the phenomena of natural and difficult labors, and the diseases of puerperal women; and here, as in the first history of the practice of midwifery, we find the "sages femmes" in attendance on lying-in women.

About this epoch in our history, a valuable improvement was made in the science of obstetrics, promulgated by the discoverer, Ambrose Pare, that of *turning* and *delivering* by the feet.

As it was the first that was ever made to the profession, his dilineations and directions are so appropriate, that we have taken the liberty of copying a short paragraph from his works, bearing date 1665.—"It is supposed to be a natural and easy birth, when the infant comes forth with his head forward, presently following the flush of waters; and it is more difficult when the infant comes forth with its feet forward; all the other waies are most difficult. Therefore midwives are to be admonished, that as often as they perceive the child to be coming forth none of these waies, but either with its belley, his back forward as it were doubled; or else with its hands stretched out, *that they should turn it and draw it out by the feet;* for the doing thereof if they be not sufficient, let them crave the assistance and advice of some expert Chirurgian."

Having thus slightly alluded to some of the incidents and early history of the science of obstetrics, permit us, before we preceed to notice any recent improvements, to say one word by way of comparison to the other departments of the profession.

It is a source of great satisfaction to the obstretician, that in the art of *delivery*, to witness himself in advance of the other accomplishments in the profession of medicine; for in all, and every possible presentation that the fetus may assume in a common ordinary healthy mother, sufficient to mature and develop her child, no one acquainted with the science of obstretrics, as at this day taught and practiced, would say, that such a one could not be delivered.

The scientific knowledge, and dexterous manipulations now in the possession of the art, inspires a confidence that renders defeat herein impossible.

The child may be still, or the mother may die from the effects of the Cæsarian operation, or puerperal fever, yet such after casualties do not in the least deteriorate from the near perfection of the art. The last, and one of the crowning accomplishments in the science, was to find an agent, the soothing power of which would, without injury to the mother, enable her to bring forth her child without perceiving those spasmodic and painful contractions of the abdominal muscles, and uterine apparatus, so essential in the expulsion of the fetus.

This anaesthetic agent has been most happily presented to the profession in the "etherialized chloroform," now universally known, and as extensively used, with an abiding confidence in its perfect utility as well as its safety.

The many thousand experiments, both on the surgical table and lying-in departmen , go to confirm the above declaration, coupled as they have been by many valuable dissertations, before various medical institutions' and particularly before the "American Medical Association."

Dr. Carmichal tells us "that of 80,000 surgical cases and accouchements, upon whom it had been used in the city of Edinburgh,

in Scotland, since its discovery, no fatal case had occurred from its use,"

Thus qualified in mind, and equipped with matter the accoucheur, in taking his seat by the bedside of his patient, now in the first stage of labor at full term, feels an abiding confidence in the accomplishment of his duty, in the safe delivery of his patient. He contemplates, with anxious solicitude, what *he may have* to encounter; he may have a natural presentation and a quick, hurried delivery, followed by all the favorable symptoms and incidents he might desire; or he may have some of those preternatural presentations, requiring turning as recommended by Pare, and a footling delivery; or, he may have an extra uterine fetation, with all the unfavorable prognostics connected therewith; or he may have a mal-formed, disproportioned pelvis, through which he has to operate; or a monstrous fetus to take from its mother; or he may find it necessary to use his forceps, his perforator and crotchet in facilitating delivery; or he may have placenta previa and the critical hemorrhage incident thereto; and after delivery he may have hour-glass contraction of the uterus and adhered and retained placenta; yet, under any of those critical conditions, his confidence remains steadfast and unshaken.

How different are our feelings when obliged to encounter the malignant forms of scarlatina; the collapsed stage of cholera; the hectic flush attendant on ulcerated tuberculated lungs; the infantile hydrocephalus, &c., &c.; yet, even in those, it is very gratifying to observe that the profession is making sensible improvements.

Within the last year, a Doctor George Pollock, lecturer on anatomy in the St. George's Hospital, London, delivered a report before the Royal Medical and Chirurgical Society of that city, an abstract of 583 post mortem examinations of the *uterine organs*, made at said hospital from 1841 up to 1850.

It appears from the context that Dr. Pollock or his assistants were in the habit of examining, for nine years, the organs of generation of every woman that died in the hospital, in order to ascertain if there was *any* disease, or morbid development existing at the time of death in any of those generative functions; and, if so, to note it. Of the 583 post mortems, made during the nine years previous to the report, the Doctor says he found 265 in which some *one* or more of the generative organs were morbidly implicated, in some form of diseased action; among those 265 cases where disease was found to exist, there were 39 fibrous tumors in the cavity of the uterus; 26 cases in which cancer existed either in the uterus or its appendages; 29 wherein the form, the size, and position of the uterus was altered. In one case there was an imperforate vagina, which had been operated upon, and death had followed the operation; also one extra uterine fetation, followed by a rupture of the fallopian tube, in which the fetus and placenta had been contained, hemorrhage and death followed; also in one case there was a fistula

between the vagina and rectum. The Doctor found 117 cases among these 265, wherein the *ovaries* were implicated with disease, viz., 51 cystic; 18 cancers; 17 in a morbid congestion; 13 agglutinated to surrounding tissues; and 10 in a state of atrophy.

It does not appear that many of the deaths were occasioned by the diseases found in the uterine appendages.

We highly approve of post mortem examinations, in order to a correct diagnosis of diseased action upon the human system as developed during life; and also admire, as well as approve, of Dr. Pollock's industry and careful labor which he has manifested in his examinations and publications; but, in order to make such developments useful to the profession, we conceive it to be necessary, in all cases, that the train of symptoms, step by step, should be given; and given in connection with a correct history of the case. We conceive that post mortem *appearances only*, without any reference to age, constitution and the *train* of symptoms which point to those appearances during life, are deprived of a great portion of their usefulness.

In the American Journal of Medical Sciences, for April, 1852, we have recorded two or three interesting cases of uterine hemorrhage during pregnancy, by Dr. Young, of Chester, Pa. The first case the Doctor recites, was a lady near her full time, with her sixth child. The hemorrhage at times was copious, and at considerable intervals, which prostrated her strength, and enfeebled her locomotion. On examination (per vaginam) the placenta was found directly over the os uteri; and during all this time the lady had been entirely free from uterine pain. In consultation it was concluded to give her the ergot of rye; but no uterine *pains* were brought on by its use, but it had this effect upon the muscular fibres of the uterus—of contracting upon the mouths of the bleeding vessels, and thereby arresting the hemorrhage. After waiting and watching the greatly debilitated lady, for three or four days, uterine pains came on, and she was delivered of a *still* child, and five hours after died herself.

The second case, the Doctor was called in consultation to a lady in her eighth month of uterine gestation; excessive hemorrhage existed, which was found to proceed from a detached placenta from the fundus of the uterus; by the aid of ergot, brandy and the forceps, they were enabled to deliver the woman, who recovered.

Dr. Young also records a case, where a long funis had three times surrounded the neck of the child in utero; and, on that account, the Doctor says there was not sufficient length left in the cord to permit the escape of the fetus until *he* had *exposed* the woman, ligated and divided it We hope Dr. Young will excuse us for saying, that we very much doubt the propriety of exposing *any lady* for such a purpose.

In the same Journal we find three cases of hemorrhage from the umbelicus in new-born infants, by W. C. Bailey, M. D., of Spencertown, New Jersey. The hemorrhage made its appearance soon

after the remnant of the cord came off; there appeared a strong tendency to a hemorrhagic diathesis, actively existing with an effort pointing to this recent wound for an outlet. In the first two cases the Doctor applied compresses, bandages, stiptics, etc., with such careful constitutional remedies as the state of the system appeared to require; but they both died, one on the 12th, and the other on the 13th day of its age.

In the *third* child, the Doctor concluded, in addition to his other remedies, to try the effect of a ligature, by passing two needles at right angles under the bleeding vessels, under which, with a suitable ligature he ligated the bleeding vessels; this judicious practice arrested the hemorrhage, but in six days after, purple spots came out over the body and limbs of the child, as also on the mucous lining within the mouth, and on the 13th day of its age this child died also.

In the London Lancet, for May, 1852, there is an interesting case of a large sub-cutaneous nævus, given by J. Woolcott, Esq., Surgeon to the Kent Opthalmic Hospital, situated on an infant nine weeks old. The Doctor says the tumor, which was of a blue livid color, occupied the whole of the upper eyelid, with a small portion of the root of the nose on the right side, and extended upwards upon the brow and forehead as high as the upper border of the orbicularis muscle, outwards and downwards, it reached nearly the tragus of the right ear; and then extended upwards and inwards among the lower margin of the zygomatic process of the temporal bone to the external angle of the orbit, where it joined the morbid product of the upper eyelid. There was no pulsation in the tumor; it was soft and compressible, and increased greatly when the child cried, and then assumed a dark purple color. He was debarred the use of the ligature, on account of the great deformity which it would occasion from cicatrization causing eetropium; he punctured it freely with a fine cataract needle, and applied the diluted tincture of iodine over the punctures. This treatment was continued for one month without any advantage; the Doctor now introduced the vaccine-lymph around the circumference of the tumor, with short intervals between each pit; the most of them took and produced considerable irritation, swollen face, head and neck, attended with fever and much constitutional disturbance, which continued nearly a fortnight; after which the child recovered, the tumor entirely disappeared, leaving no traces of any kind of deformity, except a few small scars where the vaccine-lymph was introduced.

In the same number of the Lancet, Dr. Harper relates a case in which he found a sack about the size of an egg, in the body of the placenta, and on opening it, he found it to contain earthy matter, in appearance of dry mortar, which would readily crumble between the thumb and finger; the lady did well, and had a healthy restoration.

Puerperal fever sometimes follows accouchements, and at some

seasons this disease is greatly influenced by some epidemical diathesis in the atmosphere, or contagious propagation malignantly influencing the type and character thereof. In whatever way this disease may have had its origin, accoucheurs are *generally* of one mind as to its incipient *inflammatory* character; I say *generally*, because there are some objections to this opinion.

Professor Meigs, who is good authority in this department of obstetrical science, (and upon whose labor we have drawn freely in some parts of this paper,) has exercised a faithful and commendable research in the characteristics of childbed fever, and has but one opinion to give, and that in favor of its inflammatory origin; and it would be derogatory to the opinion of your Committee, from a long series of pathological investigations and puerperal practice, to promulgate any other. Many of our American, as well as European writers speak of the *epidemic* character of puerperal fever; while some others on both continents, contend that this disease is actually contagious; assuming a specific erysipelatous character, imparting to others in the lying-in departments the same malignant taint and fatal tendency, as well as the *wounds* in the adjoining surgical wards.

Professor Meigs, (above quoted,) who does not believe in the contagion of puerperal fever, gives the name of a noted accoucheur, a particular friend of his, whose fame and skill had brought him an extensive business in this department, was so unfortunate one season as to have puerperal fever in almost all his lying in patients; which at length claimed such notoriety as to excite in the minds of the people that, in some way or other, something about him was imparted to his patients that gave rise to this fatal disease; notwithstanding the Doctor used every possible care and precaution on his part, to prevent anything being carried or propagated whatever; changing all his clothing of every description, using the warm bath, shaving off all his hair, putting on entire new clothing, new wig, &c.; yet the same fatality appeared to be visited upon his female patients as heretofore. And as a further evidence of some malignant influence operating among his patients, fifteen of the children born among the Doctor's lying-in patients *died* with erysipelas, commencing at the umbilicus, after thirteen of the mothers had succumbed to the malady.

One would be almost ready to conclude, from this kind of evidence, that there was something very much like contagion in the origin of this disease.

In a Report read before the Edinburgh Obstetrical Society, in April, 1851, by Dr. Arnith, an Assistant Accoucheur in the Lying-in Hospital at Vienna, he says, "that he had been three years connected with this institution, during which time 10,000 women had been confined there; that puerperal fever had prevailed in the lying-in wards in this institution to an alarming extent; that the Medical Council, in making their investigations into the cause of this fever, were struck with the fact, that the mortality was much greater

in the wards where the male medical students were taught, than those set apart for the education of midwives." In the progress of the investigation it was observed, "that the young men (medical students) were in the daily habit of assisting in and at the autopsies, in which eight or ten took place every day; the dissections were sometimes executed by the students; the subjects and morbid specimens and preparations were handled by them; the assistant was in the practise of lecturing to the class on obstetrical operations and manipulations, demonstrating on the dead subject, and this day after day; the young men handling, manipulating, &c., on the same subject, going directly from this into the lying-in ward, examining the pregnant and paturient women"

Every one who has been engaged in post mortem examinations, must be aware of the disagreeable exhalations, which it is impossible to rid one's self of by ever so careful ablution; this odor which remains about the hands, is more lasting the more such dissections are repeated; and it is an intuitive truth, that this offensive odor is dependent on some substance detained upon the epidermis, and is still sensible as long as the least atom remains; and we all know how active the process of absorption is carried on in pregnant women. After carefully investigating all the known causes tending to produce childbed fever, in the lying-in wards in the Vienna Hospital, the Council arrive at the following conclusion, viz:

"That any fluid matter in a state of putrefaction, communicated by the finger, by the linen, by a catheter, by a sponge, and even by the ambient atmosphere, impregnated with foul substances, may produce puerperal fever."

These conclusions lead to an inquiry for some disinfecting agent, by which the poisonous qualities that adhere with such tenacious obstinacy to the hands of the students, as well as every other substance with which it may come in contact, might be neutralized and destroyed: to answer this purpose the "Chloride of Lime" was found, on repeated experiments, to possess this quality. An order was made, and rigidly enforced, "that every student, before examining any woman in the clinic, should carefully cleanse himself with this solution."

The result of this salutary hygienic process was attended with the happiest results. "Of six hundred women that were confined the next months following, there were but six deaths from puerperal fever."

We think there can be no doubt as to the mode in which the matters of putrefaction act on the system; and whether taken from the dissecting table, from handling morbid specimens, from attending on malignant puerperal fever, then directly making obstetrical examinations—they all act upon the same general principle, as *punctures* inflicted in dissections, and *end*, unfortunately, too often in the same way; showing the necessity not only of strict cleanliness thereafter, but also the free use of the disinfecting agent.

Your Committee most cordially approve of the salutary sugges-

tions made by some of our American Obstetricians,* "that physicians make it an abiding practice on all occasions, of bathing their hands in warm water before making obstetrical examinations." It renders the touch more acute; it removes that harshness upon the surface that is very irritating to a tender excitable mucous membrane; and besides, it imparts not only to the lady herself, but to the inmates of the chamber, a propriety and confidence in the physician.

In conclusion, we wish to call the attention of the Society to an improvement in the mechanical machinery for ascertaining and understanding the language (so to speak) of some of the functions in the *thorax* and *abdomen* of the human body, and the morbid derangements which sometimes take place therein.

Your Committee has the pleasure to introduce to the notice of the Society, a new instrument invented by J. MARSH, M. D., of Cincinnati. This instrument as *per se* is made of Indian rubber material, calculated and arranged to collect the *sounds* by a fine elastic drum of the same material, and conveyed to *both* ears at the same moment. With a well experienced ear it is admirable, and with what exact certainty this information is made to tell the condition of those important functions in those cavities in the *living* subject.

Then, in addition to this instrument, the Doctor has a very fine elastic bulb of the same material, much allied to a soap-bubble in appearance, about one inch in diameter, neatly connected and adjusted to the end of a metalic tube, for the purpose of collecting information from the cavity of the uterus. By applying this bulb in close contact with the os-uteri, and connecting the conveying tube thereto, the information is brought to both ears at the same moment of the smallest sensible *tick*, that the fetal heart gives off. We believe the profession will realize much advantage from the use of this instrument; and we feel ourselves under obligations of gratitude to Dr. Marsh, for his ingenious construction of so useful and delicate an instrument.

WILLIAM JUDKINS,

Chairman of the Committee on Obstetrics.

CINCINNATI, Ohio, 5th mo., 1852.

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*Dr. Meigs.

LIST OF MEMBERS.

NAMES.	RESIDENCE.
G. W. Boerstler,	*Lancaster.*
John Butterfield,*	*Columbus.*
Francis Carter,	"
Jesse P. Judkins,	*Cincinnati.*
W. R. Kable,	
John B. Thompson,	*Columbus.*
J. B. Potter,	*Canal Winchester.*
P. M. Crume,	*Eaton.*
J. F. Hibbard,	*Montgomery Co.*
W. W. Rickey,	*Cleveland.*
Norman Gay,	*Columbus.*
S. R. Chandler,	*Duncan's Falls.*
Elijah Carney,	*Berkshire, Del. Co.*
R. Hills,	*Delaware.*
A. L. Cass,	*Coshocton.*
G. W. H. Laudon,	*Westerville.*
Jared P. Kirtland,	*Cleveland.*
J. W. Russell,	*Mount Vernon.*
John White,	
S. F. Willson,	*New Holland.*
L. Helmick,	*Harrisburg.*
J. C. Norton,*	*Marion.*
W. Hendren,	*Delaware.*
D. Lewis,	*New Haven.*
B. F. Gard,*	*Columbus.*
S. B. Davis,	*Lockbourne.*
M. Brown,	*Circleville.*
R. L. Howard,	*Columbus.*
G. W. Mavis,	"
A. Ball,	*Irville.*
G. W. Helmick,	*Harrisburg.*
Berkley Gillett,	*Springfield.*
S. P Hunt,	*Morrow.*
William Fisher,	*Lancaster.*
J. Helmick,	*Harrisburg.*
G. E. Ells,	*Lithopolis.*
J S. Risinger,	*Galion.*
M. Dana,	*Risden*
E. Gaston,	*Morristown.*
Thomas W. Gordon,	*Georgetown*
W. W. Jones.	*Toledo.*
J. S. Skinner,	*Columbus.*
R. P [illegible]ley,	*Poseyville, Posey Co., Ia.*
C. Thompson,	*South Bloomfield.*
William H. Hudson,	*Chester.*
E. T. Brown,	*Logan.*
J. Morrison,	*Columbus*

*Since dead.

NAMES.	RESIDENCE.
K. Hornbeck,	*New Carlisle.*
H. S. Conklin,	*Sidney.*
G. W. House,	*Harrisburg.*
F. T. Hurxthal,	*Massillon.*
Isaac Huestes,	*Chester Hill*
L. G. Harley,	*Dalton.*
E. H. Davis,	*New York City.*
D. A. Fisher,	*Baltimore.*
P. Goble,	*Worthington.*
P. Pence,	*Pickaway.*
A. M. Slocum,	*Cincinnati.*
H. K. Steele,	*Dayton*
W. Trevitt,	*Columbus.*
Philip J. Buckner,	*Cincinnati.*
O. F. Edwards,	*Loudonville*
Benj. P. Furguson,	*Kirkersville.*
Robert Houston,	*South Charleston.*
Robert Hamilton,	*Morristown.*
William H. Ramsey,	*Mount Vernon.*
William Johnson,	*Delaware.*
Charles Robertson,	*McConnellsville.*
J. J. McIlheny,	*Fairfield.*
W. W. Hubbard,	*Elyria.*
A. J. Bennett,	*Bolivar.*
James M. Briggs,	*Caledonia.*
N. Atwood,	*Russellville.*
Mathew Thompson,	*Mount Vernon.*
J T. Updegraff	*Mount Pleasant.*
John Delamater,	*Cleveland.*
H. A. Ackley,	"
D. B. Moods	*Warren.*
Wm. Judkins,	*Cincinnati.*
John N. Wilson,	*Newark.*
Geo. J. Sasche,	*Lancaster.*
W. H. Davis,	*Bellepoint.*
S. M. Smith,	*Columbus.*
Norton S. Townsend	*Elyria.*
M. Z. Kreider,	*Lancaster.*
Robert Thompson,	*Columbus.*
G. Volney Dorsey,	*Piqua.*
Jno. L. Vattier,	*Cincinnati.*
James Smith,	*New Lexington.*
Edw. Smith	*Dayton.*
M. Garst,	"
Danl. Tilden,	*Cincinnati.*
W. Waddle,	*Chillicothe.*
S. Hanbury Smith,	*Columbus.*
James Van Pearse,	"
H. C. Howard,	"

NAMES.	RESIDENCE.
H. C. Foster,	*Enon.*
G. F. Michell,	*Mansfield.*
S. C. Rives,	*Cincinnati.*
Julius T. Taylor,	*Carrollton.*
A. N. Boalse,	*Lockbourne.*
Charles E. Denig,	*Columbus*
John T. Shotwell,	*Cincinnati*
S. R Snodgrass,	*Dalton*
R. D. Mussey,	*Cincinnati.*
W. H Keever,	*Ridgeville*
W. B McGuire;	*Waynesville*
David B. Van Tugle,	*Dayton*
A. W. Thompson,	*Kingston*
James P. Henderson,	*Newville.*
Sylvanus Fisher,	*Waynesville.*
J. M. Bigelow,	*Lancaster.*
F. Cook,	*Atwater.*
J. W. Hamilton,	*Columbus*
R. G. McLean,	*Lockbourne.*
G. S. B. Hempstead,	*Portsmouth.*
W. R Bricker,	*Shelby.*
E. Field,	*Frankfort*
O. E. Davis,	*Lancaster.*
E. L. Miner,	*Lithopolis.*
J. P. Buiz,	*Ironton.*
M. B. Wright,	*Cincinnati.*
Charles Grant,	"
Wm. Albers,	*Lancaster*
Charles W. Wright,	*Cincinnati.*
H. L. Th all,	*Columbus.*
John Dawson,	"
J. M. Brown,	*Cincinnati.*
S. V. Firor,	*Tarleton.*
A. C. McLaughlin	*Tremont*
J. W. Tullis,	*Troy*
J. P. Coulter,	*Wooster.*
L. W. Foulke,	*Chillicothe*
E. P. Fyffe,	*Urbana*
C. H. Beach,	*Wellington.*
W. H. Reeves,	*Deavertown*
O. G. Selden,	*Shanesville.*
Robt. Rogers,	*Springfield.*
William M. Awl,	*Columbus.*
M. Effingu,	*Lancaster.*
T. P. McCullough,	*Columbus.*
Tom O. Edwards,	*Cincinnati*
C. E, Ames,	*Cleveland*
Theodatus Garlick,	"
E. F. Bryan,	*Granville.*
C. P. Lauden,	*Westerville.*
O. P. Langworthy,	*Reynoldsburgh.*
Saml. Willey.	*Columbus.*
Charles Woodward,	*Cincinnati.*
T. W. Jones,	*S. Bloomfield.*
W. T. Clarke,	*Central College*
J. D. Gailey,	*Dalton.*
Timothy H. Baker,	*Millbrook.*
D. H. Selver,	*Milford Centre.*
M B. Cochrane,	*Delaware.*

NAMES.	RESIDENCE.
David Wilson,	*Licking County.*
C E. Boyle,	*Columbus.*
Robert M Denig,	"
Stephen Bonner,	*Cincinnati*
Harvey Fasset,	*Johnstown.*
S. St. John,	*Cleveland.*
A. H. Baker,	*Cincinnati.*
William Estep,	*Lindsville.*
J. S. Newberry,	*Cleveland.*
H G. Cary,	*Dayton.*
Thomas G. Cleveland,	*Cleveland.*
Frank Brooks,	*Hope.*
Benj Stanton,	*Salem.*
E. W Howard,	*Akron.*
Geo S. Metzger,	*Columbia.*
P. A. Gordon,	*Cleveland.*
T. Sterling,	*Ohio City.*
Elias Fisher,	*Lebanon.*
E. Sterling,	*Cleveland.*
A. L. Dille,	*Mayfield.*
J. A. Sayles,	*Ohio City.*
G. P. Ashmun,	*Hudson.*
Joseph Cole,	*Akron.*
Benj Tappan, Jr,	*Steubenville.*
Abel Cary,	*Salem.*
E. Angel,	*Akron.*
B. Sheldon,	*Ohio City.*
R Story,	*Cleveland.*
Rudd C. Hopkins,	"
W. C. Moore,	*Congress.*
M. L. Hewitt,	*Cleveland.*
Alexander R McDonald	"
M. L. Wright,	"
Joseph Price,	*Randolph.*
L. Collins,	*Ravenna.*
W. Und rwood.	*New Baltimore.*
E. Kelly,	*Elyria*
J. Laug Cassels,	*Cleveland.*
John A. Knowlton	*Franklin.*
Saml. Millikin.	*Hamilton.*
L. D. Griswold,	*Elyria.*
J. N. Green,	*Bainbridge*
William Smith,	*Gages.*
John S, Conlan,	*Cleveland.*
William Dolman,	"
William Huber,	*Hamilton.*
N B Marsh,	*Cincinnati.*
H. O. Mack,	*Shelby.*
Jacob Crabbe,	*Olivesburgh.*
P. E. Munger,	*Medina.*
Howard Alden,	
James Bronson,	
E. Kirby Chamberlain,	*Cincinnati.*
Jacob Hammond,	
S. F. Rukenrod,	
L. Haldeman,	
Abram Metz,	
A. S. Williams,	
N. K. McKenzie,	

NAMES.	RESIDENCE.
John Ingram,	*Savanna*
Thomas B. Johnston,	*Xenia.*
J. A. McFarland,	*Tiffin City*
Thomas S. Redman,	*Cleveland.*
C. N. Lyman,	*Wadsworth.*
A. C. Smith,	*Medina*
J. D. Colton,	*Marietta*
C. Brodbeck,	*Dayton*
Chas. C. Hildreth,	*Zanesville*
V. Smith,	*New Carlisle.*
Jonas Moore,	*Marietta.*
Alexander Fisher,	*Akron*
Aurelius H. Agard,	*Western Star.*
Alvin Belden,	*Ravenna.*
G. W. Caid,	*Painesville.*
Andrews Merriman,	*Madison.*
Lorenzo A. Hamilton,	*Chardon.*
Peter Allen,	*Kinsman.*
John Mack,	*Shelby.*
W. A. Nicholson,	*Cleveland.*
W. Silvey,	*Manchester.*
Geo. W. Roby,	*Bainbridge.*
Solomon Steward,	*Mansfield.*
J. J. Delamater,	*Cleveland.*
John G. Purple,	*Brooklyn.*
John N. Stockstill,	*New Carlisle.*
D. D. ameron,	*Cleveland,*
Daniel Shrorder,	*Ganges.*
C. P. Allen,	*Elyria*
A. D. Bigelow,	*Cleveland.*
Pierre Beaugrand,	*Fremont.*
James Robertson,	*Perrysburgh.*

TRANSACTIONS

OF THE

EIGHTH ANNUAL MEETING

OF THE

OHIO STATE MEDICAL SOCIETY

HELD

IN THE CITY OF DAYTON, JUNE, 1853.

DAYTON.
B. F. DUBOIS & CO., PRINTERS.
1853.

TRANSACTIONS

OF THE

EIGHTH ANNUAL MEETING

ERRATA.

Take out on 84th p. 2nd line, J. W. Dawson, Cincinnati.
Insert on 84th p., bottom, W. W. Dawson, Cincinnati.
Insert on 85th p., Jos Haines, Dayton.
For J. P. Potter, on 86th p., 41st line, read J. B. Potter.

HELD

IN THE CITY OF DAYTON, JUNE, 1853.

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B. P. DUDOIS & CO., PRINTERS.
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TRANSACTIONS

OF THE

EIGHTH ANNUAL MEETING

OF THE

OHIO STATE MEDICAL SOCIETY,

Held in the City of Dayton, June 1853.

DAYTON, OHIO, June 7, 1853.

Society convened in Clegg's Hall at 10 o'clock A. M.

The President being absent, Vice President, H. S. Conklin, presided.

The meeting was opened with prayer by Dr. P. J. Buckner.

On motion, a Committee of five was appointed by the Chair to nominate permanent Officers for the ensuing year.

Committee:--John Dawson, John Delamater, L. M. Lawson, H. G. Carey, E. P. Fyffe.

At the request of the Society, Prof. R. L. Howard gave a concise statement of the proceedings of the late meeting of the American Medical Association held in the city of New York.

On motion, H. S. Koehne was admitted as reporter of the transactions of the Society for the Dayton Gazette.

The Committee on admissions proposed for membership the following persons, who were elected:

J. G. Rogers,	New Richmond,	W. B. McAroy,	Franklin,
Jno. A. Warder,	Cincinnati,	A. Mosgrove,	Urbana,
Cornelius Smith,	Donnelsville,	Wm. Goddard,	"
John Davis,	Dayton,	J. M. Mosgrove,	"
C. N. Hoagland,	Tippecanoe,	L. C. C. Gille,	Westville,
R. H. Tipton,	Darbyville,	S. W. Fuller,	West Liberty,
Gerhard Paoli,	Springfield,	E. S. Lane,	Sandusky,
Elijah T. Collins,	South Charleston,	Joshua Martin,	Xenia,
Jas. R. Dawson,	Bellbrook,	M. L. Houston,	South Charleston,
Josh'a Clements,	Dayton,	I. Hendershot,	Springfield,
G. W. Sampson,	McCutcheonville,	I. A. Coons,	Dayton,
William Mount,	Cincinnati,	S. G. Armor,	Cleveland,
C. S. Kaufman,	Cincinnati,	B. Neff,	Piqua,
J. G. Peage,	Enon,	W. B. Hawkes,	Tarlton,
W. L. Peck,	Circleville,	B. S. Lawson,	Cincinnati,
L. Rigdon,	Hamilton,	P. S. Conner,	"
W. H. Scobey,	Rossville,	D. E. Wade,	"

The Committee on nominations presented for the consideration of the Society their report, whereupon the following officers for the ensuing year were elected by ballot:

PRESIDENT:

JULIUS S. TAYLOR.

VICE PRESIDENTS:

ROBERT RODGERS,
THOS. McNALLY,
STEPHEN BONNER,
MATTHEW THOMPSON.

SECRETARIES:

HENRY K. STEELE,
C. S. KAUFMAN.

TREASURER:

P. M. CRUME.

LIBRARIAN:

J. W. HAMILTON.

COMMITTEE ON ADMISSIONS:

M. GARST,
S. W. FULLER,
G. S. B. HEMPSTEAD,
SAML. MILLIKIN,
E. S. LANE.

The Committee on Admissions presented the following named persons for membership, all of whom were elected:

Oliver Crook,	Dayton,	James Crook,	Dayton,
H. Van Tuyl,	"	Wm. Bell,	Xenia,
J. N. Gard,	Greenville,	D. K. Green,	Jamestown,
Saml. Martin,	Xenia,	J. E. Matchett,	Castine,
Adam Koogler,	Greenville,	W. L. Schenck,	Franklin,
T. C. Owen,	Mechanicsburg,	W. T. Sharp,	West Liberty.

The following gentlemen, delegates from their respective Societies, were admitted as *ex officio* members of this Society:

E. B. STEVENS, ISAAC L. DRAKE, W. L. SCHENCK, from the Warren Co. Med. Society.

B. S. LAWSON, L. M. LAWSON, C. S. KAUFMAN, P. S. CONNER, D. E. WADE, from Hamilton Co. Medical Society.

JOSHUA CLEMENTS, JOHN TREON, from Montgomery Co. Med. Society.

The Society took a recess until 2 o'clock this afternoon.

AFTERNOON SESSION, 2 o'clock P. M.

President JULIUS S. TAYLOR, in the chair.

The minutes of the morning session were read and approved.

Dr. John Dawson offered a resolution, which, as amended by Dr. William Judkins, was adopted thus:

Resolved, That the following shall be the *order of business* at the present sessions of the Society:

1st. Reading minutes of the previous meeting.
2nd. Report of Committee on Admissions.
3d. Reports of Standing Committees.
4th. Reports of Special Committees.
5th. Unfinished Business.
6th. New Business, Reading Papers, &c.

The Report of the late Treasurer, W. W. RICKEY, was then presented and read by Dr. R. G. McLean, and on motion of Dr. P. J. Buckner, it was referred to a select committee of three.

Committee:—P. J. BUCKNER, SAML. ST. JOHN, T. O. EDWARDS.

The reports of the Standing Committees being now in order, were called for.

The Chairmen of the different Committees expressed their inability to report, from want of sufficient notice of their appointment, by reason of the delay in publishing and circulating the transactions of the last meeting.

The reports of the Special Committees were called for.

Prof. St. John stated that the Chairman of the Committee on Medical Literature, J. S. Newberry, was prevented by sickness from making his report: Whereupon, on motion of Prof. R. L. Howard, it was

Resolved, That the report of Dr. J. S. Newberry, who is now on a bed of sickness, be placed in the hands of the Publication Committee to be published.

The remainder of the Special Committees offered no report.

On motion of Dr. P. J. Buckner, it was

Resolved, That a committee of three be appointed on *Obituary Notices*, with instructions to report also on the professional life and character of Prof. Daniel Drake, deceased.

Committee:—P. J. BUCKNER, L. W. FOULKE, JOHN DAWSON.

The following titles of Papers to be read before the Society, were presented to the Secretary for record:

By G. PAOLI—"General Remarks on Typhoid Fever."

By SAML. G. ARMOR—"The Zymotic Theory of Essential Fevers."

By Prof. L. M. LAWSON—"Remarks on the nature and treatment of some of the more prominent diseases of the Nervous System."

Doctor Paoli read his Paper, which, after some discussion, was referred, on motion of Dr. Dawson, to the Publication Committee, with discretionary power as to publishing.

On motion of Dr. J. J. McIlhenny, on account of the imperfect pronunciation of Dr. Paoli, his paper was read to the Society by the Secretary.

The Committee on Admissions reported the names of

I. K. Gilbert, of Tippecanoe, | McMeans, of Sandusky,

for membership, and they were elected.

The Committee further reported that the names of some persons were presented to them, which they did not feel at liberty to nominate for membership.

On motion of Prof. T. O. Edwards, Art. 3 of the Constitution was suspended, and a select committee of three--JNO. DELAMATER, H. S. CONKLIN, H. G. CAREY--was appointed to hear and report on all applications for membership not reported on by the Committee on Admissions.

On motion of Dr. J. J. McIlhenny, Prof. T. O. Edwards was requested to deliver a popular lecture this evening, before the Society and the citizens of Dayton.

Doct. R. G. M'Lean offered the following resolution:

Resolved, That when this Society adjourns, it will adjourn to meet in the city of Columbus on the first Tuesday of June, 1854.

Laid on the table, on motion of Prof. L. M. Lawson.

On motion of Dr. M. Garst, it was

Resolved, That the Society hold the remainder of its present sessions in the Third-street Presbyterian Church.

On motion, the Society then took a recess, to meet in Beckel's Hall at 8 o'clock this evening, to hear Prof. Edwards's address and receive a Medal from the Montgomery county Medical Society.

BECKEL'S HALL, EVENING SESSION, 8 o'clock.

President in the chair, and an unusually large audience present.

Prof. T. O. Edwards was introduced by the President, and delivered a very able and interesting address on "The Poetry of Science."

A Gold Medal of the value of SIXTY DOLLARS, and appropriately ornamented, was presented by Dr. D. A. COX in behalf of the Montgomery County Medical Society, to the State Society, to be awarded by them as a premium to the writer of the best essay on some medical subject, and to be presented at the next annual meeting of the Society.

President Taylor, in behalf of the Society, received the Medal in a short and very pertinent address, and appointed as the

COMMITTEE TO AWARD THE MEDAL:

H. L. THRALL, of Columbus,
G. W. BŒRSTLER, of Lancaster,
ROBT. THOMPSON of Columbus,
P. J. BUCKNER, of Cincinnati,
JOB HAINES, of Dayton.

(*See Appendix G for instructions to competitors for the Prize.*)

The Society then adjourned until 9 o'clock to-morrow morning.

THIRD-STREET PRESBYTERIAN CHURCH,
WEDNESDAY MORNING, June 8th.

President in the chair.

The transactions of yesterday were read and approved.

On suggestion of Dr. J. B. Thompson, the names of the recently admitted members were called, that any errors in name or address might be corrected.

The President announced the following Committees:

STANDING COMMITTEES.

EXECUTIVE.

Charles Woodward, H. S. Conklin, H. Vantuyl, J. W. Tullis, Nath'l Strong.

FINANCE.	PUBLICATON.
Joshua Clements,	Henry K. Steele,
W. B. McAroy,	M. Garst,
B. Gillett,	Isaac Kay,
E. P. Fyffe,	H. G. Carey,
W. S. Newton.	C. S. Kaufman.
MEDICAL ETHICS.	**MEDICAL SOCIETIES.**
John Dawson,	John Davis,
William Judkins,	L. W. Foulke,
Oliver Crook,	R. Hills,
G. S. B. Hempstead,	W. Bell,
Joshua Martin.	J. D. Cotton.

SPECIAL COMMITTEES.

SURGERY.	PRACTICE.
G. Volney Dorsey.	L. M. Lawson,
J. W. Russell,	G. W. Bœrstler,
Edwin Smith.	Robert Thompson.
MEDICAL LITERATURE.	**OBSTETRICS.**
Saml. G. Armor,	Charles C. Hildreth,
R. J. Shackelford,	John N. Green,
H. L. Thrall.	E. Gaston.

The following titles of Papers to be read before the Society, were laid upon the Secretary's desk:

By G. W. MARIS--"Stabbing--Wound of the left Kidney--Hemorrage from the Bladder--Recovery--Remarks."

By JAMES BRONSON.--"A case of Encysted Tumor connected with the left Kidney."

By W. B. CHAPMAN.--"The uncertainty of Pharmaceutical preparations, and the Most eligible form of medicines for administration."

By C. W. WRIGHT.--"A New Compound Antidote."

Dr. Samuel G. Armor read his paper.

Dr. Hendren moved to refer it to the Committee on Publication, with instructions to publish.

Many remarks complimentary of the paper and writer, and much discus-

sion as to the best mode of disseminating it, was elicited, which was participated in by Drs. Cox, Mussey, Baker, R. Thompson, Jno. Delamater, W. Judkins, L. M. Lawson, Dorsey, McLean, Schenck, Howard and Kirtland.

Dr. L. M. Lawson moved to amend Dr. Hendren's motion by adding, "and that the Secretaries be instructed to have that portion of the address which relates to *Vital Statistics* printed in separate form and transmitted to the principal towns of the State, with the view to its publication in newspapers. Adopted. (See Appendix F.)

The Committee on Admissions reported for membership,

William Huber,	Hamilton,	W. B. Chapman,	Cincinnati
L. J. Smith,	"	Landon Rives	"
D. H. Brinkerhoff,	Tippecanoe,	J. J. Quinn,	"
E. B. Stevens.	Lebanon,	J. S. Dodge,	"
I. N. Converse,	Union City, Ia.	Thos. Wood,	"
James Hopple,	Cincinnati,	W. W. Sanger,	"
Cornel's G. Comegys,	"	John O'Ferrall,	Piqua.
Wm. McHenry,	Lima,	John A. Smith,	"
W. H. Lamme,	Centreville,	V. D. Brownell,	"

Joseph Weaver, Miamisburg, Elected.

On motion of Dr. J. B. Thompson, the Treasurer was authorized to collect the last year's assessment from those members who are in arrears for it.

Dr. G. Volney Dorsey offered the following resolution, to be laid on the table and made the order of the day for this afternoon:

Resolved, That the officers of the several County or District Societies, auxiliary to the State Medical Society, be requested each year to report to the Secretary of said Society, the names of all their members, to serve as a basis for the Medical statistics of the State, and that the several Colleges of the State furnish the Secretary with a list of their graduates, annually, and that no Physician not in good standing in his own County or District Society, shall hereafter be admitted as a member of the State Medical Society.

On motion of Dr. Mount, Society took a recess until 2 o'clock this afternoon.

AFTERNOON SESSION, 2 o'clock.

Vice President Rodgers in the chair. Transactions of morning session read and approved.

On motion of Dr. John Dawson, it was

Resolved, That no speaker be allowed to occupy more than fifteen minutes at any one time, speaking to any question, and that no one should be allowed to speak more than once on the same question, until all who desire to speak, have been heard.

On motion of Dr. Cox, S. C. Clisbe was admitted as a reporter of the proceedings of the Society for the Dayton Empire.

The Resolution of Dr. Dorsey was now called up under the order of the day.

Dr. Landon Rives, with the consent of Dr. Dorsey, offered the following addendum to his resolution:

Resolved, That the Ohio State Medical Society deny the privileges and benefits of said Society to such persons as attend incorporated institutions, or attend the poor (where provision is made by proper authorities for furnishing them with medical attention) for a pecuniary consideration less than the established rate of charges in the district, county, city, or town, where such person may reside.

Dr. J. G. Rogers moved to strike out all after the word "and" in the 5th line of Dr. Dorsey's original resolution and insert

"That persons applying for membership in this Association shall be admitted only upon a certificate of membership from a local Society, where such exists, in the applicant's county."

Much discussion arose upon these questions, between Drs. Dorsey, Rives, Edwards and Tipton.

On motion of Dr. Jno. Dawson, the whole matter was referred to a select committee of three--Dorsey, Rives and Rogers--for satisfactory adjustment and presentation to the Society in a more tangible shape.

Drs. W. Waddle and A. W. Thompson of Ross co. asked leave to withdraw from the Society. Granted.

Dr. P. J. Buckner, Chairman of select Committee to whom was referred the Treasurer's Report, asked to be continued one year. Granted.

Dr. P. J. Buckner, Chairman of Obituary Committee, offered a report, which, on suggestion of Prof. T. O. Edwards, was withdrawn, and the Committee continued one year.

Prof. Jno. Delamater, Chairman of select Committee on Nominations, reported the name of William Buckner of Hamilton, for membership, who, on motion of Prof. T. O. Edwards, was unanimously elected.

The Committee on Admissions announced for membership

John W. Green, of Fairfield, | C. G. Espich, of Germantown,
Edward Mead, of Cincinnati. Elected.

The Select Committee to whom was referred the resolution of Dr. Dorsey, with the addendum of Dr. Rives, and amendment of Dr. Rogers, submitted the following Resolutions to serve as substitutes:

Resolved, 1st., That the officers of the several County or District Societies, auxiliary to the State Medical Society, be requested each year to report to the Secretary of said Society, the names of all their members, to serve as a basis for the Medical statistics of the State, and that the several Medical Colleges of the State furnish the Secretary with a list of their graduates annually, and that persons applying for membership in this Association, shall be admitted *only* on a certificate of membership in a local Society, where such exists, embracing his county.

Resolved, 2nd, That the Ohio State Medical Society do deny the privileges and benefits of said Society to such persons as attend incorporated institutions or attend the poor (where provision is made by proper authorities for furnishing them with medical attention) for a pecuniary consideration less than the established rate of charges in the district, county, city, or town where such person may reside.

On motion of Prof. Edwards, the resolutions were laid on the table and made the order of the day for to-morrow morning.

Prof. Lawson read his paper to the Society.

Prof. Delamater moved to refer it to the Committee on Publication, with instructions to publish.

The merits of the paper were hereupon discussed by Drs. R. Thompson, John Dawson, John Delamater, and Joseph Cole, and the motion to refer carried. (See Appendix A.)

A communication from Prof. Kirtland was read, in which he stated that on all occasions he had declined to act as one of the committee in awarding the Cleveland Premium.

Whereupon Dr. R. H. Tipton offered the following resolution:

Resolved, That any vacancies which may have occurred in the Committee raised at the last meeting of the Society on Prize Essays, be filled, and that said Committee proceed to carry out the object of their appointment.

Carried.

The President finding the Committee vacated, instituted the following

COMMITTEE TO AWARD THE CLEVELAND PREMIUM;

J. P. KIRTLAND, JOHN DELAMATER, JOHN DAWSON.

The Committee on Admissions proposed J. B. Craighead, of Dayton; W. W. Dawson, of Cincinnati: Job Haines, of Dayton, for membership, who were duly elected.

On motion of Dr. J. Cole, an assessment of One Dollar was made upon each member to meet the current expenses of the year.

A communication from the Editors of the *Dayton Empire* was read, presenting papers, containing the Proceedings of the Society, for gratuitous distribution.

A communication from Dr. R. Hills was read, requesting his continuance on the Biographical Committee, and as Chairman of the Committee on Typhoid Fever.

On motion his appointments were continued one year.

A communication was presented from the Mont. Co. Medical Society, inviting the members of the Ohio State Medical Society to a Social Entertainment, given in honor of their visit to Dayton, at the Phillips House this evening.

Dr. G. W. Maris read his paper, and it was referred to the Publication Committee, with instructions to publish. (See Appendix, B.)

On motion of Dr. J. J. McIlhenny, Prof. St. John was requested to deliver an address before the members of the Society and citizens of Dayton, to-morrow morning at 11 o'clock.

Adjourned until 8 o'clock to-morrow morning.

MORNING SESSION, June 9th, 8 o'clock.

President in the Chair.

The transactions of the previous session were read and approved.

Committee on Admissions announced the name of P. S. Conner, of Cincinnati, for membership. Elected.

The Treasurer presented the account of H. G. Carey for $6 98. Referred to the Finance Committee.

The resolutions from the Select Committee, Dorsey, Rives and Rogers, were called up under the order of the day.

Prof. Kirtland moved that the whole subject be postponed until the next annual meeting.

Dr. P. J. Buckner moved as a modification, which was accepted as such by Prof. Kirtland, that the whole subject be indefinitely postponed.

The President decided that the Resolutions of the Committee were out of order, as conflicting with the Constitution and By-Laws, and required them to be laid upon the table until the next meeting, before action could be taken on them. Whereupon

Dr. P. M. Crume offered the resolutions presented by the Committee, as amendatory to the Constitution and By-Laws, to be acted on at the next meeting of the Society.

The paper presented by Dr. Jas. Bronson was read by the Secretary and referred, on motion of Dr. P. J. Buckner, to the Publication Committe, with instructions to condense and publish. (See Appendix, C.)

The paper of Dr. W. B. Chapman was read by Dr. C. W. Wright, and referred, after complimentary remarks by Drs. Warder and Cox, to the Publication Committee, with instructions to publish. (See Appendix, D.)

Dr. C. W. Wright read his paper. Referred to Publication Committee, with instructions to publish. (See Appendix, E.)

The Committee on Medical Societies, through their Chairman, John Davis, reported that the "Champaign County Medical Society," having complied with the usual requisitions, was entitled to admission as an auxilliary society.

The report was adopted,—the Society received as Auxilliary No. 16, and Drs. A. Mosgrove and Jas. M. Mosgrove, officers of said society, as *ex officio* members.

Dr. W. B. Chapman, of Cincinnati, presented specimens of *Phloridzine*, a preparation from the Apple-tree Root and Bark, of his own extraction—recommended as a substitute for Quinine.

On motion of Dr. J. A. Warder, Drs. D. A. Cox and W. B. Marsh were appointed a Committee to experiment upon Phloridzine as a remedial agent, and report at the next meeting.

The Committee on Admissions reported for membership R. J. Shackelford, of Medway and Henry H. Seys, of Springfield.—Elected.

The following resolutions were offered to the Society :

By Dr. J. P. Buckner :

Resolved, That the health of the citizens of a State forms a portion of its wealth, and should receive the protection of Legislative enactments, when necessary.

Resolved, That a suitable Registration Law, which would furnish correct statistical facts relating to population, births, marriages, deaths, &c., would add to our information concerning the absolute and relative healthfulness of different localities, and thus lay the foundation of a sanitary survey, which would greatly benefit the people, by preventing a vast amount of unnecessary disease and its consequences; and in this way contribute to increase the productiveness and wealth of the State.

Resolved, That this Society approve of and recommend to the Legislature of this State the passage of the bill introduced at its last session by Dr. John L. Vattier, entitled "A bill to provide for a Bureau of Statistics in the Secretary of State's office."

Resolved, That the Secretary forward a copy of these resolutions to the Legislature, by placing them in the hands of some member who is favorable to the passage of said bill.

Resolved, That a Committee of Three be appointed to draw up a suitable memorial to the Legislature, and that each member of this Society use his influence with the members of the Legislature in securing the passage of such a law.—Adopted.

Committee :—E. P. Fyffe, W. M. Awl, M. Z. Kreider.

By Dr. P. J. Buckner :

Resolved, That the Secretaries of the different County and other Medical Societies, throughout the State, be and are hereby appointed a Committee to report to the next meeting of this Society upon the Medical Topography of their respective localities, and upon the diseases pertaining thereto during the year 1859.

Resolved, That the Secretaries of the County and other Medical Societies be also requested to send by the 15th of January, or as soon thereafter as practicable, a copy of such reports as they may be able to make to this Society, to Dr. George Mendenhall, of Cincinnati, Chairman of a Committee appointed by the American Medical Association to report upon the Epidemics of Ohio, Indiana and Michigan, for the purpose of enabling him to make a full report to the meeting of that body to be held in St. Louis in May next.

Resolved, That the Secretary notify the different members of this Committee of their appointment.—Adopted.

By Dr. John A. Warder :

WHEREAS, Medical Topography is, in the estimation of this Society, a subject of profound importance to our profession; and, whereas, it must be confessed that we need much more information upon this subject than is ow within our reach. Therefore

Resolved, That a Committee be appointed to memorialize our Legislature, uesting them to pursue the Geological Survey of the State, which has en unfortunately suspended.—Adopted.

Committee :—Samuel St. John, W. W. Dawson, H. Van Tuyl.

By Dr. Wm. Judkins :

This Society having been informed of the late melancholy calamity

which took place on the 6th of May last on the New York and New Haven Railroad, at a place called Norwalk, in the State of Connecticut, by which some 48 persons were killed, among whom were Abel L. Peirson, M. D., of Salem, Mass., Archibald Welch, M. D., Hartford, Conn., Josiah Bartlett, M. D., Stratham, New Hampshire, Samuel Beach, M. D., Bridgeport, Connecticut, James M. Smith, M. D., James H. Gray, M. D., of Springfield, Massachusetts, William C. Dwight, M. D., Moscow, N. York, seven Physicians, while returning home from the late meeting of the American Medical Association held in the city of New York. This intelligence of the sudden and irreparable loss of so many valuable members, at a time when they, in common with others, were engaged in promoting the interest and prosperity of the medical profession, has produced a sorrowful impression upon the minds of their brethren throughout the Western country. We are well aware that it is not in our power to arrest the poignant pangs of grief occasioned by this sad catastrophe, but we desire most affectionately to present to the families and friends our tenderest sympathies and condolence, in this, their trying bereavement: Therefore

Resolved, That our President and Secretaries be requested to sign a copy of these proceedings, and forward one to each Physician's family thus bereaved.

By Dr. John A. Warder:

In consideration of the lamentable fact that our noble Profession, in its ardent pursuit after knowledge and its legitimate rewards, has unhappily overlooked some of the important collateral branches of Natural Science, all of which bear directly upon the success and standing of the Science of Medicine; and whereas the *study of Botany* has been so much overloooked by our members that we point to few who are familiar with the plants about them, though many of them are of direct value as remedial agents, and at the same time those whom we consider *Quacks* are taking advantage of our supineness, and rising in popular favor by their attention to these important remedial agents: Therefore

Resolved, That our members, especially the younger portion, are urged to devote themselves to this branch of Natural Science, particularly in the department of Medical Botany, and that a Committee be appointed to report to this body, at its next meeting, upon the "Botany of Ohio."—Adopted.

Committee:—J. S. Newberry, W. Hendren, J. M. Bigelow.

On motion of Dr. Landon Rives, a Committee of Three was appointed on "Microscopy," to report at the next meeting of the Society.

Committee:—Landon Rives, W. W. Dawson, W. W. Sanger.

Dr, John A. Warder presented for the inspection of the Society a specimen plate of a series of Lithographic Impressions of Dissections of the Brain, by Dr. Landon Rives.

The resolution of Dr. McLean on the adjournment of the Society to meet in Columbus next June, was taken up.

Dr. P. J. Buckner moved to strike out Columbus, and insert Cincinnati, and thus amended the resolution carried.

Dr. Landon Rives offered the following resolutions:

Resolved, That the thanks of the Ohio State Medical Society be tendered to the Trustees of the Third-street Presbyterian Church for their very

great kindness in furnishing the use of their comfortable building for the sittings of this body.

Resolved, That the Secretary of the State Medical Society be requested to present the thanks of this body to Messrs. CLEGG and BECKEL for their politeness and liberality in profering us the use of their beautiful and commodious Halls, in which some of the meetings were held.

On motion of Dr. Sanger it was

Resolved, That our thanks be presented to the Press of this city for furnishing us with their daily papers, containing reports of the proceedings of this Society, news of the day, &c.

On motion of Dr. Jas. M. Mosgrove,

Resolved, That a Committee of Three be appointed to report at our next meeting upon the efficacy of the *Vaccine Virus* now in use by the Profession for the prevention of Small Pox.

Committee: -- Jas. M. Mosgrove, J. D. Cotton, W. H. Lamme.

On motion of Prof. J. P. Kirtland,

Resolved, That the thanks of this Society be returned to the members of the Montgomery County Medical Society for their polite attention during the present session.

On motion of Dr. P. M. Crume,

Resolved, That the Constitution and By-Laws of this Society be added as an Appendix to the transactions of the present session. (See Appendix, H.)

The hour of 11 o'clock having arrived, and a large audience assembled, Prof. St. John read a paper on the "Unity of the Human Species," which was received with marked attention and interest.

The Society took a recess until 2 o'clock this afternoon.

AFTERNOON SESSION. 2 o'clock.

President in the Chair.

Transactions of the morning session read and approved.

The following resolutions were offered:

By Dr. P. J. Buckner:

WHEREAS the Medical Profession feel greatly the want of some well regulated system for the collection of Medical Statistics, embracing the topography and character of diseases, their order and frequency of occurrence in the various counties of the State at particular seasons; and, whereas the accumulation of such facts would be of great value to the Profession and society at large, and afford in time the basis or data from which much valuable and practical matter may be derived: Therefore

Resolved, That this Society recommend to each of its members and Auxiliary Societies to keep a record of the number of cases of each variety of disease which may occur in their practice monthly, with brief accounts of the topography of their particular locality, the state of the weather, &c., and report the same annually to this Society.--Adopted.

By Dr. C. W. Wright:

That a Committee of Three be appointed to investigate the influence of the different constituents of the sun's rays upon the vegetable and animal economy, to report at the next annual meeting of the Society.--Adopted.

Committee: -- Chas. W. Wright, Landon Rives, W. W. Sanger.

By Prof. L. M. Lawson:

That a Committee be appointed to report at the next meeting on the Epidemics of the State of Ohio, and that Dr. John Dawson of Columbus be Chairman of the Committee, with the privilege of appointing as many associates as he may see proper.--Adopted.

By Dr. Thos. McNally:

That a delegation, consisting of one-tenth of our present members be appointed to represent the Society in the American Medical Association at its next meeting, in St. Louis, May, 1854.

Prof. A. H. Baker offered to amend, by moving that the Chair appoint a Committee of Three to select the Delegates.

Amendment accepted, and the resolution adopted.

Dr. Landon Rives moved that the Committee be instructed to appoint alternates, who shall serve as regular Delegates, if they cannot attend.

Adopted, and the Chair appointed the

Commitee: -- A. H. Baker, John Delamater, John Dawson.

On motion of Dr. M. Garst, Prof. St. John was requested to furnish a copy of his admirable Lecture, to the Publication Committee.

The following resolution was adopted as offered by Dr. D. A. Cox:

That the thanks of this Society be, and they are hereby tendered to the President and his Associates, the Secretary and Treasurer, for the able and impartial manner in which they have discharged the duties of their stations.

The thanks of the Society were returned, on motion of Dr. James Crook, to Messrs. KOEHNE and CLISBE, for the correct and faithful manner in which they have reported the proceedings.

The Committee to appoint Delegates to the American Medical Association, presented their report as follows:

Delegates.	*Residence.*	*Alternates.*
G. W. BOERSTLER,	Lancaster,	M. EFFINGER.
ELIJAH CARNEY,	Delaware,	S. F. WILSON.
JOHN DAWSON,	Columbus,	J. B. THOMPSON.
B. GILLET,	Springfield,	ROBT. RODGERS.
JOSHUA MARTIN,	Xenia,	T. B. JOHNSTON.
WM. McHENRY,	Lima,	E. T. BROWN.
G. E. EELS,	Lithopolis,	J. B. POTTER.
H. S. CONKLIN,	Sidney,	H. T. FOSTER.
J. J. McILHENY,	Fairfield,	J. W. GREEN.
MAT. THOMPSON,	Mt. Vernon,	J. W. RUSSEL.
S. ST. JOHN,	Cleveland,	H. A. ACKLEY.
J. N. WILSON,	Newark,	GEORGE W. SASCHE.
G. V. DORSEY,	Piqua,	. . . . .
H. G. CAREY,	Dayton,	H. VAN TUYL.
M. GARST,	Dayton,	H. K. STEELE.

Delegates.	*Residence.*	*Alternates.*
G. S. B. HEMPSTEAD	Portsmouth,	M. H. KEEVER.
L. W. FOULKE,	Chillicothe,	T. MCNALLY.
E. P. FYFFE,	Urbana,	J. M. MOSGROVE.
WM. HUBER,	Hamilton,	L. RIGDON.
G. F. MITCHELL,	Mansfield,	. . . . .
C. WOODWARD.	Cincinnati,	L. RIVES.
L. M. LAWSON,	Cincinnati,	P. J. BUCKNER.
P. S. CONNER,	Cincinnati,	C. W. WRIGHT.
C. G. COMEGYS,	Cincinnati,	JOHN DAVIS.
P. M. CRUME,	Eaton,	D. A. COX.
PETER ALLEN,	Trumbull,	JAS. BRONSON.
C. P. ALLEN,	Elyria,	. . . . .
C. C. HILDRETH,	Zanesville,	H. O. MACK.
J. D. COTTON,	Marietta,	S. V. FIBOR.
E. T. COLLINS,	South Charleston,	ROBT. HOUSTON.
A. C. SMITH,	Medina,	C. N. LYMAN.
J. P. COULTER,	Wooster,	. . . . .

The report was adopted, and the above named Delegates unanimously elected.

The Society adjourned to meet in Cincinnati the first Tuesday in June, 1854.

JULIUS S. TAYLOR, PRESIDENT.

HENRY K. STEELE, C. S. KAUFMAN, } Secretaries.

NOTE.—Those persons whose names do not appear in the Transactions, will find the reason for the omission by reference to Article 4, Section 2, of the By-Laws, which reads thus:

"Every member, on admission, shall pay the sum of $3 00, as an initiation fee, and sign the Constitution and By-Laws; nor shall he be entitled to the rights of membership until the same is done;"

Also to the Minutes of the meeting in 1851, when, on motion of Dr. Carter, the Secretaries were instructed to notify all members who have not paid their initiation fee, that their names will be stricken from the rolls, if payment is not made within two months.

COM. ON PUBLICATION.

APPENDIX.

[A]

REMARKS ON THE NATURE AND TREATMENT OF SOME OF THE MORE IMPORTANT AFFECTIONS OF THE NERVOUS SYSTEM, WITH SPECIAL REFERENCE TO COMA.

BY L. M. LAWSON, M. D., OF CINCINNATI.

The diseases of the nervous system, whether acute or chronic—inflammatory, congestive, or spasmodic—exhibit the highest degree of interest and importance to every practitioner of Medicine and Surgery. It must be confessed that, in many respects, the physiological and pathological relations of the nervous system are doubtful and obscure, and its diseases too often intractable and fatal; but in the midst of these doubts and difficulties it is gratifying to perceive, that the rapid improvements in our science within recent periods, have imparted to this whole subject more exact relations and definite results; and that it has finally attained a degree of precision which at least suggests the hope that remedies may be employed in a more rational manner and with more certain effects.

The true basis of practical medicine is *pathology;* and the true basis of pathology is *physiology;* and it is a full and complete comprehension of each division of this tripartite science which enables the practitioner to make a rational application of remedial agents, and to escape the mazes of an indefinite empiricism. The nervous system is intimately associated as a whole, and yet exhibits, in its different segments, such individuality of action, that the closest scrutiny and the clearest perception of the influence exerted by each part, becomes necessary, in order to attach to each portion its true relation to disease. The peculiar blending of symptoms, and the almost unlimited correlation of

NOTE.—This paper was not designed to compete for the prize, and therefore was not submitted to the Committee.

secondary events, demand the most careful and rigid analysis at the bed-side, and a just appreciation of those great and inflexible laws which govern this important function.

In a brief essay, like the present, it is obviously impossible to do more than examine the out-line of the more prominent features of this great subject; the field indeed is too broad for minute survey, and we can hope to present only a few of the more important elements of the topics before us, such as may serve to arrest the attention of the practitioner.

Those affections of the Nervous System which will best subserve the present purposes, and which will be principally discussed, are embraced under the terms *apoplexy, coma, congestion, and spasmodic diseases.*

The affections designated by the terms apoplexy, coma and congestion, evidently sustain an intimate relationship to each other; and yet, in clinical parlance, they are separated into somewhat distinct groups. Thus insensibility *suddenly* occurring, is usually termed *apoplexy;* when more gradual in its access we employ the term *congestion;* and the stupor arising from the poison of typhus, scarlatina, opium, or similar agents, is usually denominated *coma.*

The differences between some of these conditions will be quite apparent when we contrast their causes, modes of access, and prominent symptoms. Thus, one class of cases result from a determination of blood induced by hypertrophy of the left ventricle of the heart; in another class there is disease of the cerebral arteries; in a third, valvular disease, or extensive dilatation of the heart, preventing a free return of the venous blood from the brain; in a fourth case there may be deranged circulation of the brain independent of the heart; in a fifth example the affection may result from a poisoned state of the blood, induced by disease or drugs; and in the sixth class insensibility may arise from anæmia.

In view, therefore, of the great contrariety of causes capable of inducing an apoplectic or comatose state, we cannot fail to be impressed with the marked differences which must necessarily characterize each class, and the extent to which our therapeutical agents must be modified. Thus, the two extremes are represented by extravasation or strong determination on the one hand, and a state of anæmia on the other.

Notwithstanding, however, these obvious and strongly marked dissimilarities, there are certain points of resemblance between all of the conditions named; and in each one, as the morbid action advances, a state is finally reached in which they appear to coalesce, and to all external appearances become nearly or quite identical. It becomes, therefore, a subject of deep interest to the practitioner to recognize the points of *similarity*, no less than those which mark their distinctive features.

It will probably occur to most persons, that the terms apoplexy and congestion, as applied to the series of affections mentioned (some of which present widely different conditions) are peculiarly inappropriate, and that they serve to fix the attention on a single element of disease, to the exclusion of others equally important. As a general remark, the terms apoplexy and congestion convey but a single and common idea, and seem almost indissolubly connected with some form of *excessive* action which demands reduction. But inasmuch as these terms are applied to widely different pathological states, it becomes desirable to find a substitute either more general in its signification, or less erroneous in its application, so that it may fairly apply to the whole series of morbid conditions, although it may fail to designate the actual morbid change. The best substitute that we have at command is COMA. Thus *coma* could be employed as a generic term representing the entire series of affections characterized by insensibility; and the different *grades* could be represented, according to their several conditions, by the terms *active*, *passive*, *anæmic*, and *toxic*. The substitution of this term would at least relieve the practitioner from the influence of a leading false idea; and instead of being confused by technicalities based on accidental circumstances or remote analogies, the mind would be permitted to reach conclusions warranted by the facts of each case.

The question which we wish to solve is embraced in the following inquiry: What is the pathological condition of the brain in the state denominated COMA? This question does not admit of a simple or categorical answer, but must be reached through a somewhat circuitous course of investigation.

Physiology teaches us that the nervous system is made up of what are called centres and tubes; that nerve-centres or ganglia originate nervous action, while the tubules merely serve to conduct or distribute the influence to different parts of the body. In order to sustain the

normal action of the nerve-centres, two conditions are required: 1. A proper arrangement of the organic structures of the part; and 2. A due supply of arterial blood.

It is obvious, therefore, that diseases of the nerve-centres must arise either from changes of structure, or a modified condition of the quantity or quality of the blood.

When the supply of arterial blood exceeds the physiological proportions required to maintain an equilibrium of action, the resulting phenomena will be those of excitement; but if that excitement be long continued, perverted action is liable to ensue, and as a general rule *depression* follows. An agent or condition, therefore, capable of inducing excitement in the beginning, may speedily be followed by corresponding depression; and in the extremes of such effects we witness delirium on the one hand and coma on the other. Thus coma may arise indirectly from over-excitement; or, an agent in one proportion causes delirium, in another coma.

Another well-established law of the nervous function, is, that a *diminished* supply of blood is equally potent in inducing coma; so that opposite conditions may lead to the same general result—the one direct, the other indirect.

These are the ordinary effects of the increase or diminution of the proportions of blood; but we shall perceive by tracing the subject further in detail, that depraved or altered qualities of blood are equally pernicious. It will be remarked that the healthy performance of the functions of the brain depends on a due supply of *arterial* blood; and it necessarily follows that a disproportionate increase of *venous* blood must result in definite morbid actions. Venous blood, it is well known, is directly depressing to the nervous function, so that it becomes indeed a poisonous fluid; and when its quantity is sufficiently great, coma is one of the legitimate and certain consequences.

Independent, however, of the common elements of venous blood, there are other agents of a poisonous character which enter the circulation and induce coma. Among these are certain excrementitious substances, especially urea and the elements of bile; many extrinsic agents, such as opium, chloroform, alcohol, and other narcotics; and the poisons of typhus, scarlatina, and some other diseases.

In view of the preceding facts, we are authorized to enumerate the following circumstances under which coma may be induced: 1. By

an excess of venous blood; 2. As the consequence of various intrinsic and extrinsic poisons; 3. From a state of anæmia. To these it may be supposed we should add the effects of arterial determination; but it is by no means certain that a quantity of arterial blood sufficient to cause insensibility, can be suddenly distributed to the brain, and therefore, that the coma which sometimes follows such a condition is a secondary result, in which the venous radicals and capillaries become involved. There is sufficient evidence for the belief, that the arterial blood which can be suddenly precipitated on the brain is not capable of doing more than to cause delirium, as the immediate result, and that coma, when it does occur, is a secondary or remote consequence of the primary affection.

But we cannot advance further in the discussion of these laws without adverting to the peculiarities of the cerebral circulation, and thus developing the modes by which it may most readily become deranged.

The doctrines of Monro; the experimental researches of Kellie; and the practical illustrations of Abercrombie, seemed to prove that the fluid contents of the cranium remain under all circumstances nearly or quite the same. This opinion rests mainly on the following positions: that the cranium forms a spherical, bony case, which protects its contents from the influence of atmospheric pressure; that the cerebral substance, its membranes, blood, and cerebro-spinal fluid completely and perfectly fill the sphere; that the substance of the brain is not compressible by the force of the circulation; and, finally, that no one part of these contents can be be removed without a corresponding increase of some other constituent. Thus, if the quantity of arterial blood be diminished, that in the veins proportionally increases, and vice versa; and if the whole amount of blood becomes reduced, the *serous* contents will be augmented to supply the deficiency.

More recently, Dr. Burrows has undertaken, by a series of nearly similar experiments, to investigate the same subject, and he has reached the conclusion that the law announced by Monro and Kellie is not true, and that the quantity of blood in the brain *can* be materially increased or diminished.

It is, however, a most singular and important fact, that Dr. Burrows evidently failed to comprehend the opinions of Dr. Kellie; and in his anxious desire to disprove what was not asserted, succeeded

too well in establishing a suppositious extreme far more pernicious than the supposed errors taught by Kellie.

It was not asserted by the promulgators of the first doctrine that the *blood* of the brain could not be diminished, but the law was that one *fluid* could not be reduced without a corresponding increase of another. Dr. Burrows proved nothing except the fact that the brain may be at one time engorged with blood and at another comparatively exsanguious;—a fact that no one will deny, but which most of us have practically verified. Indeed it is abundantly evident that every diminution either of blood or the cerebral substance will be speedily followed by an increase of serum. Thus, it has been shown by Andral that, as the mass of the brain diminishes in old persons, the cerebro-spinal fluid increases; and it is on the same principle that an effusion of serum is accompanied by a diminution of blood giving rise to a blanched condition of the brain.

We may safely affirm, therefore, that Dr. Burrows was correct in fact, but wrong in *principle;* while Dr. Kellie was sustained both by principle and fact.

It is not my purpose to contend for the doctrines of Kellie in all of their most extreme relations; but there are abundant reasons for the belief that as the arterial blood of the brain diminishes, the venous increases, and vice versa. And as these are the principal changes which occur in ordinary recent cases known as apoplexy, we may, for all practical purposes, regard the cerebral blood vessels, taken collectively, as maintaining their plenitude even under depletion.

It is important to bear in mind that this law is not one of mere scientific curiosity, but on the contrary it becomes of great practical value; it teaches the essential principle that, as a general rule, we cannot remove cerebral congestion by mere depletion, for by thus weakening the force of the heart and diminishing the quantity of arterial blood, stasis of the venous circulation is promoted and the morbid action increased.

Another peculiarity of the cerebral circulation which becomes important in this connection, is the mode in which the arterial blood is distributed to the substance of the brain.

The arterial blood, it is well known, is supplied to the brain through he internal carotids and the vertebral arteries. The aggregate quanity of blood conveyed by these vessels is very large, but their mode of listribution is such that the numerous currents reach the cerebral sub-

stance in a remarkably gentle and gradual manner. This important provision is the result of several peculiarities of structure. Thus, the current of blood ascends against gravity; then the carotids enter the cranium in an indirect and tortuous manner; and, finally, these vessels divide into three principal trunks, which speedily subdivide still further, until the minute branches which pass from the pia mater to the cerebral substance are but little larger than ordinary capillaries. The vertebral arteries observe the same general laws in their distribution.

It is evidently impossible, therefore, that a large or forcible current of blood can be precipitated on the brain; and it is extremely doubtful whether a quantity of arterial blood sufficient to produce insensibility can be suddenly introduced into the brain, except by extravasation. The common, and perhaps universal effect of an excessive action of the arterial capillaries of the brain is delirium; while coma, or insensibility, arises from an excess of the venous circulation.

Another provision against the accumulation of arterial blood in the brain is found in the free anastomosis of arteries. This arrangement is observed in both the larger and smaller branches;—the larger constituting the circle of Willis, while the smaller subdivisions freely unite on the surfaces of the cerebrum and cerebellum. This freedom of anastomosis secures an equal distribution of arterial blood throughout the brain, and prevents undue accumulation in any particular part.

We perceive, therefore, that the arterial blood is so distributed to the brain as to afford a remarkable safe-guard against its sudden accumulation. The arterial capillaries are doubtless constantly varying in activity, and the quantity of blood circulating through the brain, in a given time, is liable to great increase; but the gradual manner in which the the blood is introduced and the free anastamosis of vessels secure an equal distribution throughout the brain, and the veins are thus enabled to convey off any sudden increase in quantity; so that, within ordinary physiological limits, we find no special result except increased mental activity, and the carotids may throb violently for hours without causing disease. But when urged beyond physiological limits, disease, manifested by delirium, will be the result.

The next point to be noticed, in this connection, is the *venous* circulation of the brain. The venous radicals of the brain are collected into small trunks in the substance of the organ and in the pia mater,

and finally proceed to those large channels known as sinuses, and which may be regarded as mere expansions of the venous trunks.—The circulation through the sinuses is comparatively sluggish and easily retarded, and thus offers an impediment to the escape of blood from the brain. It is important to remark that the force by which the venous circulation is chiefly maintained, resides in the capillary system, and according to the best physiological views, this capillary force is intimately connected with the nutritive function. In addition to this, the veins of the brain have no valves, so that a backward action readily reacts on the cerebral circulation.

These anatomical and physiological facts show very clearly that the venous circulation of the brain is liable, from various causes, to become retarded. This, impaired or irregular action of the heart prevents the free return of blood; deranged nutrition diminishes the capillary force and the momentum of the current, and the sluggish circulation of the large inelastic sinuses is readily impaired and lends its influence to the other causes. In view of these facts, we cease to be surprised that nearly all forms of death exhibit more or less venous engorgement of the brain.

Another law of the cerebral circulation, which bears on the present subject, is, that the *tonicity* of the walls of the capillaries is under the immediate control of the ganglionic system of nerves, and that when the nervous function seconds depression the capillaries dilate, nutrition becomes deranged, and the circulation is rendered proportionately stagnant. In other words, congestion, and even *coma*, may ensue.

We have now before us the principal laws governing the circulation of the brain, and which may be thus enumerated:

1. The inclosure of the brain within a bony case, its exemption from atmospheric pressure, and its uniform quantities of fluids—the venous blood increasing as the arterial diminishes.

2. The mode of distribution of arterial blood, which prevents a sudden and overpowering accumulation.

3. The facility with which the venous circulation becomes retarded.

4. The influence of the ganglionic nerves on the tonicity of the capillaries.

We are now prepared to generalize from the preceding anatomical,

physiological and physical laws, and to apply these principles in the elucidation of the nature and treatment of Coma.

Several widely different conditions are met with, post-mortem, in cases of apoplexy or coma:

1. Sanguineous effusion.
2. Simple venous engorgement or congestion.
3. Effusion of serum.
4. No pathological change.

The most common lesion, and that which exists in ordinary coma, is simple congestion, at times associated with serous effusion.

It has been assumed, and perhaps generally believed, that coma depends on an augmented quantity of blood in the brain causing increased *pressure*, or even *compression* of the cerebral substance; but there are sufficient reasons for regarding this opinion as altogether hypothetical. The single fact, indeed, that a state of *anaemia*, and a weakened action of the heart, are equally as potent as sanguineous effusion in causing coma, is sufficient evidence that *pressure* is not the efficient cause. The three principal elements which make up coma may be thus expressed: 1. Depressed innervation; 2. Altered or suspended nutrition; 3. Capillary and venous engorgement. Coma, therefore, in its ultimate relations, is a state of *depression*. And in reference to this depression, it is important to remark, that it may *begin* either in the nervous or vascular system, but that both become ultimately involved.

In illustration of this state of depression, three classes of causes may be mentioned: first, examples in which the heart, by over-action, throws an undue quantity of blood to the brain, followed in due time by worn out excitability and ultimate depression and coma. In the opposite condition, constituting the second class, the efficient cause is weakened or obstructed action in the heart, which prevents a free return of blood from the head, and as an immediate consequence, hyperæmia and coma follow. In both of these examples the remote cause is somewhat mechanical and resides in the circulation, although in each one the nervous function finally becomes impaired—due in one case to overaction, and in the other to the depressing effects of venous blood. In the third class, the starting point is evidently in the nervous system itself, which becomes exhausted and is followed by the train of phenomena witnessed in coma. This condition may result from the

intense action of heat, as in *coup de soleil*—from the poisonous influence of malaria, narcotics, and various forms of disease.

Those cases of coma in which no lesions are found after death, must evidently be referred to a sudden arrest of the function of the ganglionic nerves of the brain, by which its capillaries become exhausted and nutrition suspended. Such examples illustrate with peculiar force the view of coma here advocated. They show that a state of nervous exhaustion may at once overwhelm even vascular action, and thus leave but little evidence of venous engorgement after death. It is true some portion of the blood may have been removed post-mortem; but had the quantity been sufficient to have overpowered the vitality of the part, it is hardly within the limits of probability that post-mortem action could have *entirely* removed it. Cases of this character have been detailed by Dr. Abercrombie and others, and it has been assumed that the active depletion removed the blood from the engorged vessels; but, unfortunately for this doctrine, such a measure is not calculated to produce that effect, and, above all, some of the cases had not been at all bled.

The view of coma, therefore, which seems most consonant with the laws of physiology, refers it directly or indirectly to nervous exhaustion; and as a result of this exhaustion, capillary engorgement and a suspension of nutrition follow.

We perceive now, what might readily have been anticipated, that there is a common element running through all cases of coma, whatever may be the remote cause; and although the existence of such an element does not imply an uniform course of therapeutics, still it furnishes the valuable precaution that there is a limit (and a very rigid one) to depletory measures.

The principal difficulty in admitting or comprehending this view of coma arises from the diversified causes which induce it, and the variable phenomena which attend or follow an attack. Still a rigid analysis of cases, and a proper induction from facts, will leave no doubt in regard to the ultimate morbid action. Thus, over-stimulation indirectly exhausts nervous action; and the same conditions may arise more directly from venous congestion, toxic and anæmic states of the blood, the direct action of the sun's rays, and a high degree of electricity.

It becomes necessary, however, to reconcile with this view certain

active phenomena which either attend or follow coma, among which may be mentioned throbbing of the carotids, flushing of the face, injection of the eye, and general vascular reaction.

Throbbing of the carotids in apoplexy or coma, when not dependent on hypertrophy of the heart, arises mainly, if not entirely, from a backward action or recoil, produced by a resistance to the passage of blood through the capillaries, and, to some extent, to a weakened and dilatable condition of the arterial walls. It was an observation first made by Dr. John Reid, that obstruction in the capillaries caused increased pressure in the arteries, as shown by the rising of the mercury in the hemadynamometer. The result was quite unexpected, but it brought to light an important law in pathology. In accordance with this law, the resistance to the passage of blood through the congested capillaries of the brain, causes throbbing of the carotids, (by virtue of a backward action) together with flushed face, injected eye, and similar phenomena.

Another form of excitement is witnessed *after* the supervention of coma. The pulse quickens, the head becomes warm, and other signs of *increased* action are present. This reaction, however, is due to new and independent causes. Recent observations have shown (what was not before anticipated) that paralyzed parts are liable to exhibit signs of augmented action; the capillaries dilate, and increased quantities of blood flow into the parts, and if the vitality is not overpowered, a new action is set up, and the signs of excitement become manifest. This change is doubtless due to an increase in the nutritive function, attended by the phenomena of elevated action. Such results, however, are exceedingly variable; in some instances they do not occur at all, in others they are comparatively trivial, while in another class the increased action reaches a degree nearly if not quite equivalent to inflammation. Some of these changes are witnessed in the division of the pneumogastric nerve. Such a lesion causes not only congestion and effusion into the bronchial tubes and air-cells, but even hepatization of the pulmonary structure may ensue.

On reviewing these facts, we cease to be surprised that reaction should follow coma, although the coma itself may depend on debility or loss of innervation. The reaction, therefore, is one of the legitimate results of such a condition, and is, indeed, a strong confirmation of the views advanced. It is to be remarked, however, that the reaction is

often temporary, and may speedily be followed by profound stupor; or, if sufficient vitality remains, it may advance even to the degree of inflammation.

In regard to another form of excitement, it is to be remarked that even *delirium* may arise from debility or exhausted action, and become indeed but the precursor of coma. This fact is often verified in delirium tremens, and doubtless occurs more frequently under other circumstances than has generally been supposed. In a case of delirium tremens which came under my observation recently, delirium, coma, and death were the order of events. On post-mortem inspection, the brain was found to contain less blood than natural, but the effused serum was quite abundant and had been substituted for the blood.—Here was delirium from exhaustion. In another recent example, a gentleman sixty years of age, with lax fibre, having subjected himself to close reading and unusual mental excitement, soon experienced giddiness, dimness of vision, and similar evidences of exhaustion, leading to capillary engorgement. Suddenly, in the night, he became delirious, then comatose, and soon died. In the meantime he was bled copiously, which doubtless hastened the fatal result. Here again delirium was the result of depression.

Finally, the conclusion which seems obviously to follow these facts and illustrations is, that *coma*, in its ultimate relations and true pathology is a morbid state, arising directly or indirectly from a *loss of innervation*, whereby the capillaries lose their tone, nutrition becomes impaired, and interrupted circulation and insensibility follow. The numerous causes, however, capable of inducing coma, and the many variable phenomena attending its development, are liable to withdraw the attention from the true pathological changes, and to direct it to some secondary or accidental symptom.

The preceding view of coma, if sustained by future experience and observation, (and it may be regarded as already established) will materially modify the application of remedies, and more especially will it limit the employment of blood-letting.

Medical men have so long associated with coma the idea of a tremendous rush of blood to the brain, and a state of compression of that organ, that blood-letting has come to be regarded as almost the only agent capable of arresting such a formidable disease; and it is a rare exception if a patient laboring under coma is not subjected to more

or less loss of blood, and often to a very large extent. It requires but little reflection, however, to show that such indiscriminate depletion is the result of a careless or hasty application of principles in the hurry of bed-side medicine.

When we call to mind the peculiar distribution of the capillary arteries to the brain; the tendency of a lessened arterial action to induce venous preponderance; and above all, when we bear in mind the relaxed and impeded capillary circulation resulting from a loss of innervation, and the consequent lesion of nutrition, we will assuredly use the lancet with caution and discrimination.

But in the midst of the hurry of daily practice, and the routine employment of customary remedies, we *have* acquired one salutary lesson:—If a person receive a fall or blow, which causes *concussion* and *insensibility*, few practitioners would venture on the use of the lancet; and it requires but little reflection to extend the same principle to comatose affections arising from other causes.

The results of depletion in apoplexy are forcibly exhibited in the statistics furnished by Mr. Copeman, and show at least the evil effects of a too indiscriminate bleeding. The results of 155 cases, collected from different authors, show that of those who were bled 1 in 1.51 died, while of those who were not bled the proportion was 1 in 3.2. That is, of 15 who were bled, 10 died; whereas of 15 who were not bled, only 5 died. This is a very startling and unexpected result, and although it furnishes no evidence against timely and discriminating depletion, it does prove that the usual mode of bleeding is far more unsuccesful than the opposite extreme.

It must not be inferred that I condemn bleeding altogether in coma or apoplexy; on the contrary, there are cases in which it is obviously indicated and becomes indispensably necessary; and even when not demanded by any leading or prominent indication, there are less evident conditions in which the abstraction of blood, nicely adjusted to the stage of the malady and condition of the patient, becomes an important remedy, and cannot with safety be omitted.

The greatest error, however, and the most obvious danger connected with blood-letting in apoplexy, consists in the immediate and often copious abstraction of blood *at the very onset of the disease*, when the innervation is most exhausted, and the capillary engorgement the most complete. The only guide which the practice of indiscriminate

depletion acknowledges is the degree of insensibility, which it is hoped may be relieved by depletion, although the pulse may be feeble and the extremities cold; but the result is usually different, for the nature of the lesion prevents an equalization of the circulating fluids, by the abstraction of blood, and the patient the more readily sinks under such a course of treatment.

We are irresistably led to inquire, what is the cause of the great mortality in coma? Are these affections, as a class, necessarily so fatal, or does a part of the mortality arise from indiscriminate and injudicious depletion? It is to be feared that no inconsiderable part of the mortality must be ascribed to injudicious practice. The brain is a very peculiar organ; there is greater difficulty in relieving its congestion, for the reasons already stated, than is encountered in any other structure. Destitute of a secretion or out-let, by which morbid materials can be eliminated, a state of engorgement, if not relieved, undergoes, from its own elements, a progressive increment, until it reaches a fatal intensity.

Now, with all the limitations thrown around the effects of blood-letting on the brain, can mere depletion relieve the state of depression represented by the term coma? Leaving out of view those cases which arise from hypertrophy of the heart, or organic affections of the blood-vessels, we must admit that the distension of the cerebral capillaries in ordinary coma does not depend on the force of the cardiac action, or the state of the general circulation, and therefore cannot be relieved by blood-letting; and if we add to this the conclusive fact that the abstraction of blood has a direct tendency to increase the relative proportion of venous blood, we shall at once perceive the hazardous and even fatal tendency of such a practice.

Let us enquire now, more specifically, what are the uses and restrictions of blood-letting in coma? Guided by the facts and principles which have been mentioned, the following may be assumed as the proper rules for the abstraction of blood, and the several circumstances which require it:

1. It may be employed in those cases where there is a strong action of the heart, throbbing carotids, and general plethora.

2. When the pulse is hard or corded, (although not full) with flushed face, *moderate* depletion, especially by cups, is usually advantageous.

3. Depletion may be cautionsly resorted to when reaction follows depression.

It is to be remarked, however, that even in the most strongly marked cases of over-action, either as a cause or sequence of the disease, blood-letting should be employed with much care and due limitation; and those cases in which it is applicable to any extent in the beginning, constitute rather an exception than the general rule. And where a doubt exists as to the propriety of bleeding, it will be far safer for the patient to avoid a measure which, if misapplied, may do much mischief. The indications for depletion should always be clear and unequivocal before such a remedy it employed.

It is not my purpose to give a formal or detailed account of the treatment of apoplexy or coma, but merely to indicate the chief points which accord with the principles assumed in this essay. It will be sufficient, therefore, merely to add in this connection that in a large proportion of cases as coma usually manifests itself, whether as a primary disease or as a symptom of some intercurrent affection, the first thing to be done is *not* blood-letting. The nature of the morbid action, no less than the results of careful observation, teach us that instead of depletion, we should first endeavor to restore nervous action, and equalize the circulation as primary and paramount indications. The application of cold water to the head, (suddenly applied) heat to the extremities, and internal stimulants, are among the most important and efficacious remedies. No agent is more efficient in arousing the reflex system of nerves than the cold dash; and as the excitement of this function is especially demanded in comatose affections, particularly those of sudden accession, no agent could be more appropriate, when properly and timely administered. A patient may thus be aroused and enabled to swallow, who would otherwise remain insensible. In ordinary recent cases (not dependent on the long continued effects of prostrating disease) the effects of the cold dash, together with internal stimulants, constitutes a far more appropriate and successful course than efforts to equalize the circulation by depletion.

The good effects of the cold dash, in poisoning by opium are well known; and it is not less valuable in ordinary coma, and relieves the patient exactly in the same manner. Following the cold dash, or conjointly with it, warmth to the extremities, (hot water or mustard)

stimulants, such as ammonia, should be employed in quantities adapted to the wants of the patient. Such a course will, in many instances, arouse patients from simple apoplexy, coup de soleil, or narcotic poisons, who would otherwise never revive. I have recently observed, also, that the careful inhalation of chloroform, so as to secure its stimulating and not depressing effects, is a remedy of great value.—It is particularly applicable to those cases in which the congestion does not cause entire insensibility; and it is still more obviously useful if pain be present.

In addition to the dangers of depression following depletion, there is reason to believe that the prodigal use of the lancet has a tendency to induce a recurrence of the disease, and at times to convert it into an epileptic or maniacal affection.

But there are other forms of coma in which depletion, although seemingly indicated and often practiced, is still more positively and unequivocally pernicious. In this class we find those cases which arise from anæmia or exhausted states of the system, or a poisoned condition of the blood. Children exhausted by long continued diarrhœa, finally have coma, not unfrequently with heat of the head, flushed face, and so on; but such cases cannot be relieved by leeching, nor any means of depletion, however much the symptoms may *seem* to indicate such a course. In the advanced stages of typhus or typhoid fevers, delirium, with flushed face, injected eye, and heat of the head are often witnessed; but experience abundantly testifies that bleeding will destroy the patient. And the reason of this is made plain when we open the skull and find either no sign of disease, or merely venous congestion, with more or less effusion of serum.

There is another class of nervous affections, the nature and treatment of which forcibly illustrate many of the principles embraced in the foregoing remarks. I refer to *spasmodic* diseases. But on this subject I will venture only a remark or two.

The connection between coma or apoplexy, epilepsy, puerperal convulsions, and some of the forms of mania, exhibit more intimate relations than may at first appear. Thus, many cases of epilepsy are attended not only with convulsions, but also with coma, and even mania, more or less permanent; while, on the other hand, apoplectic seizures occasionally become somewhat periodical, and in other examples are associated with convulsions. Coma involves those por-

tions of the brain which minister to sensation and volition, and epilepsy doubtless affects the sensory ganglia, and through them the mind itself. The *cerebral* seat of the two diseases is probably the same, and the difference is rather in degree than nature.

Very nearly similar pathological elements run through all these affections. Thus, *coma* is prominently characterized by loss of innervation; *epilepsy* embraces the same, varying in degree, to which is often added permanent or chronic lesions of nutrition; while *mania*, in its confirmed forms, is more especially associated with impaired nutritive action. And the relationship between these affections may be further traced in connection with their causes. Thus, the accumulation of urea in the system causes coma, while in smaller quantities it gives rise to hysterical convulsions, and there is reason to believe that epilepsy may arise from the same cause.

But without tracing further the relations which obviously exist between these affections, I desire to advert to the effects of blood-letting in the spasmodic and maniacal diseases. And in the first place, it may be stated as a sound practical axiom, that in a large proportion of these cases, more especially those of some standing, the lesions are too intricate and permanently seated to be removed by such a purturbating and revolutionary remedy as bleeding. It is obvious that the abstraction of blood can do but little to remedy a toxic condition of the blood, and still less will it be adequate to remove a lesion of nutrition.

The great object in the treatment of all such recent cases is to arrest the disease in its incipient stage, so that lesions of nutrition may not establish permanent morbid action. There is little reason to suppose that bleeding can secure this important object; indeed depletion does not cure either epilepsy or mania, and its employment in puerperal convulsions, and many other spasmodic diseases, is often productive of more harm than good. Indeed, it is far more efficient in rendering some of these diseases permanent than in accomplishing their permanent cure. This is especially true of epilepsy and mania.

The misapplication of blood-letting is forcibly illustrated in recent cases of mania. In cases of this character, the wild delirium, flushed face, and injected eye surely indicate that bleeding is most imperiously demanded; and yet abundant experience and observation leaves

room to doubt that such a course is more liable to render the maniacal condition permanent than to cure it.

Another illustration of the principle here shadowed forth is found in puerperal convulsions. As the result of fright, mental anxiety, or other cause, a parturient female is attacked with convulsions; and, according to custom, she is bled, often copiously and repeatedly, until the vital powers are reduced to the lowest point. Under this treatment the convulsions may cease, but as time passes on it is found that the patient is hopelessly maniacal! Such is the result of ill-timed and inordinate depletion.

The attention of the profession has been strongly arrested by the recent announcements that puerperal convulsions have been cured by *chloroform!* This fact contains a world of thought, and the indication which it furnishes should not be heedlessly disregarded.

I have thus hastily thrown together a few thoughts on these interesting and important topics; and if they serve to excite enquiry and to elicit truth, my object will be fully attained.

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STABBING—WOUND OF THE LEFT KIDNEY—HEMORRHAGE FROM THE BLADDER—RECOVERY—REMARKS.

BY GEO. W. MARIS, M. D., COLUMBUS, O.

The subject of the following notice, Mr. John Huffman, (Deputy Warden of the Ohio State Prison,) on the morning of the 25th Sept., 1852, was stabbed in the left side by a negro convict. The wound was inflicted with a dirk knife of domestic manufacture, having a tapering blade, about 6 in. in length. It penetrated the abdominal cavity about 3 in. below the region of the heart, and between the 7th and 8th ribs, taking a direction obliquely backward, toward the vertebral column.

About three pints of blood were lost from the external wound, before the hemorrage could be arrested, when he was removed to a bed, the edges of the wound approximated, secured by adhesive straps, and an anodyne administered.

About half past 6 o'clock P. M., of the same day, Mr. H. expressed an urgent desire to urinate, during which effort about a pint and a half of arterial blood issued from the bladder; and mixed with urine more or less, thus continued to be voided for several days.

On the 29th Sept., (four days after the injury) presuming "all to be well," and of *his own* responsibility, he dressed himself and undertook a walk to the prison shops.

He was absent about an hour and a half, when feeling uneasy, he returned to his bed, and *immediately* passed from his bladder again about 22 ounces of arterial blood. At this time his condition assumed a very alarming and hopeless aspect, death seeming almost inevitable. The pulse was scarcely perceptible, severe prostration, countenance exsanguious, and the entire surface of the body covered with a cold and clammy perspiration. Under the use of anodynes and quiet, the system rallied, and he passed a comfortable night.

The morning following, however, a new train of symptoms set in—the abdomen became tumid and tender, with increased action of the

circulation and fever, together with EXCRUCIATING PAIN during the expulsion of *blood coagula*, with which the bladder seemed filled. Under appropriate treatment, these symptoms gradually subsided, excepting a *frequent* desire to urinate, when, with every passage of water, blood passed, either in a fluid or coagulated form.

Oct. 1st. *External wound healed.*

This state of the urinary discharge continued until the 20th October following, when the urine assumed. for the first, its natural complexion, and appearances seemed to indicate a favorable tendency and crisis.

On the 21st October, expressing himself better, though greatly anæmic, he *again* arose from his bed and dressed himself as before, without advice or consultation. The day luckily passed without any untoward symptoms; but, the morning following, he was *retaken* with a recurrence of his former sufferings.

This state of things, fortunately, soon yielded. A diminution in the quantity and color of the blood followed, and with the exception of a mucous sediment, the urine soon became *again* clear, whilst the entire case promised well.

About the *ninth day* from this period, and whilst the indications were of the most encouraging and flattering kind, a sudden and unaccountable change came over our patient. The bowels now became *relaxed*, pulse rapid, feeble and intermittent, (about 120) severe prostration, voice feeble and husky, with a general sinking of the vital forces. Remaining comparatively quiet and easy after this, for several hours, he at length expressed an urgent desire, as on former occasions, to *urinate*, when he again voided a copious discharge of blood and coagula, and which, though in diminished quantities, was as before, kept up for several subsequent days. During *this change*, he complained of little or no pain any where, save a dulness in the region of the left kidney and membranes of the left thigh, at times, amounting to disability. Quantity of urine and blood voided at a single passage, averaging from 5 to 6 ounces. From this time onward, his symptoms of amendment not only improved, but seemed more *permanent*, and afforded a better earnest of *final recovery*.

A *periodicity* in the return of the hemorragic discharge was now apparent; for, however improved or improving the symptoms might have been during the lapse of seven or eight days, the 9th day or there-

abouts, following the last attack, would be sure to bring with it, in spite of all anticipated measures, a recurrence of the *hemorrhage*.

About the 22nd of Nov. all traces of blood ceased to be observed in the urine, but instead thereof, a reddish coloring matter continued to appear for several successive periods, growing lighter in color at each turn, until it ceased to be visible altogether, the "*vis vitæ*," meanwhile, recovering its tone, and the renal function its healthfulness.

The bowels, which up to this period had only evinced a tendency to looseness *at times*, corresponding with the hemorrhagic habit, *now* became a source of annoyance, equalling in obstinacy, if not in magnitude, the hemorrhage itself. Along with a troublesome diarrhœa, the extremities (lower) became anasarcous, and the pulmonary function deranged, which latter hitherto had remained undisturbed in the general struggle. These severally yielded, in time, to appropriate treatment.

April 1st, 1853. Mr. H. is well and again on duty, is improving daily in flesh and strength, and has experienced no return of any of those former troubles, which well nigh ended his existence.

Treatment. Mr. H. is a man of large frame, vigorous constitution, and active habits. On this account, we indulged the hope from the first, that with proper care and good nursing, the case would, *ultimately* do well. After the active symptoms of peritonitis had been subdued with opiates, mercurials, and vesication, our attention was mainly directed to the *permanent arrest* of the hemorrhage from the kidney. Dry cupping to the left kidney with cold applications, opiates in the form of Pulv. Doveri, combining it as occasion required, with Sub. Acet. Lead, Sulph. Ferri, and Tannic Acid, *alternately*, and in frequent doses, day and night, constituted the onset of medical treatment. As the case *progressed* and the anæmic state of the body demanded attention, Iron and its preparations, with Quinine, were successively used, but from these we had soon to desist, as it was found unsafe to use any remedy which in the *least* excited the circulation, or aided, in any degree, to bring about a plethora of the blood; hence, our chief reliance called for absolute rest, rigid diet, and opiates by the mouth and per ano. A favorite injection, and which acted at times with the happiest effect, was

℞ Tinct. Opii. 3½
Sulph. Zinci gr. x
Aqua Font. ʒiij.
Fecula q. s.

administered at bed time, for the purpose of allaying the irritation of the bowels and neighboring viscera. Nothing acted more kindly and promptly; indeed, it seemed to hold the bloody discharge at bay.

Blood having now ceased to appear in the urine, and the latter being filled with mucous deposit, we ventured upon the use of the Uva Ursi in decoction ℥j. three times a day, with Mur. tinc. Iron gtt. xx. and with good effect.

It may be well to observe here, that the stomach remained intact throughout, and such was the appetite, notwithstanding his sufferings, that no ordinary dish was unwelcome to his palate at any time, whilst he continually craved the most indigestible substances, such as tripe, pigs feet, sour kraut, &c., and which, as far as safety would permit, were allowed him in small quantities.

The bowel disorder, which subsequently became the primary trouble, was treated upon ordinary principles, no remedy answering better, or acting with more efficacy, than the common Chalk mixture of the Pharmacopœia, with 2 grs. of Tannic Acid to the ounce—a tea spoonful 3 times a day.

All hemorrhage having ceased, and the secondary symptoms not proving unmanageable, we continued the use of such remedies only, as seemed necessary, and about the middle of January, left Mr. H. rapidly convalescent.

Remarks.—We present the above case to the medical profession, as one of rare occurrence and interest, not as exhibiting any thing remarkable in the way of treatment, which in itself was sufficiently plain, but as furnishing a striking instance of the wonderful power of the "*vis medicatrix naturae*," under proper and well directed effort, in restoring the soundness and integrity of the deeply wounded and injured structures or tissues of the body. That the source of the hemorrhage from the bladder in the above case, was the left kidney, and that the glandular structure of this organ was *penetrated* by the knife, will not, we think, admit of any reasonable doubt. A number of medical gentlemen saw Mr. Huffman after the injury, and differed in opinion as to the source of the bleeding, or the *manner* in which it was occasioned. We will not, here, undertake to discuss these several opinions, some of which, for truth and logic, we fear, would not stand the test of close or rigid scrutiny. When we consider the organization of the kidney, its anatomical position, with reference to the course of the

weapon, together with all the symptoms, local and general, we cannot hesitate to conclude that the gland itself was entered by the blade, and that the blood found its way into the bladder, and out of it, *"per via urina."*

The *periodicity* of the discharge claims especial notice, as showing, more clearly, *the manner* in which the breach was healed. The plastic condition of the parts divided, was, *at first*, not sufficient to resist the momentum of the "vis a tergo," which at times or periods would acquire undue force, and owing, on the one hand, to a physiological law, subjecting secretory organs at stated periods to determinations of blood, and *then*, the increasing *stimulant* properties of the blood consequent upon general improvement.

In proportion, however, as we find the organic action, or force, of the wounded tissue returning in this instance, do we find the discharges of blood to grow less, in color and quantity, until at length nothing appears at the stated period, but a dingy mixture, having the appearance of Port wine and and water. This subsequently disappears, leaving the urine entirely and permanently clear.

A better and wiser rationale than we have here given, explaining more satisfactorily the case presented, we leave for those more familiar with the laws of pathology and physiology than we claim to be, and *whose opinions* (right or wrong) will pass more current. It may be objected, perhaps, that mere congestion of the organ consequent upon inflammation and obstructed circulation, might have caused blood to exude (exosmos) from the coats of the malphigian capillaries, as in common hæmaturia, but it may bere plied, that in this case, compared with the above, the amount of blood discharged is very small and more equally diffused through the urine; whereas in the case of Mr. Huffman, it was little diffused, and amounting at times to nearly a *pint* of pure coagula. It was before observed, that anti-periodics, stimulants, or tonics, were highly detrimental and had to be used with great caution; and that absolute rest, with calmatives, proved the surest restoratives.

These remedies, however, after all blood or traces of it had ceased to appear, were borne with advantage and were freely and liberally used. Allusion was made to the bowels, which bore an important part in the play of sympathetic disturbances, and which, in the form of a *diarrhœa*, acted as a sort of *sentinel* upon the watch tower, announ-

cing the danger at hand. This order of things was invariably observed, several hours before the discharge of blood came on.

The kidney receiving its nerves from the renal plexus, which is made up from the solar plexus and lesser splanchnic nerve, will readily account for this morbid sympathy.

[C]

ENCYSTED TUMOR OF THE LEFT KIDNEY.

PRESENTED BY JAMES BRONSON, M. D., NEWTON FALLS, O.

Frederick Hall, a native of Connecticut, age 44, of small stature, prominent chest, erect gait, by occupation a butter merchant, consulted Dr. Homer Earl, Oct. 6th, 1852, for what he considered enlargement of the spleen. His countenance at that time was unusually pale and sallow, pulse feeble, tongue coated brown, sensations of chilliness over the body.

Oct. 8th. Severe pain in the head, left side, back and limbs; pulse hard and full; tongue heavily coated; nausea and vomiting; enlargement of the left side, extending to the pit of the stomach and causing a prominent curvature of the lower ribs, with great tenderness; severe pain in the hip joint.

For the last twenty years he has been frequently troubled with a similar enlargement, and was treated for enlargement of the spleen, without beneficial results; was always relieved by an emetic.

℞ Pulv. Ipecac, to produce emesis;—threw off a large quantity of bilious matter, and much relieved.

℞ Anodyne and Diaphoretic Powders—Sinapism to the side.

Oct. 9th. ℞ Syr. Rhei, followed by ℞ Ol. Ricini ℥vi.—operated freely,—stools dark and bilious.

10th & 11th. Improving—no pain.—tenderness passing off—enlargement the same—pulse soft and regular—no fever. ℞ Tr. Iodine and fomentations to the side.

12th. Walked out. About the house most of the day.

13th. Pain in the side, but thinks he is improving.

14th. Former symptoms all returned, fever, pain, tenderness, &c. The position which now suits him best (as when I first saw him) is lying on the left hip, knees drawn up near the body, head and shoulders raised very high on pillows. ℞ Sub. Mur. Hyd., followed by ℞ Ol. Ricini, which operated freely and gave temporary relief. ℞ Sinapisms and fomentations to the side.

15th. No better. ℞ Blister to the side. ℞ Anodyne and Diaphoretic Powders.

16th. Pain and tenderness much relieved.

17th. ℞ Blister to another place lower down on the side, where there was much tenderness remaining.

18th. Pulse softening down. Symptoms more favorable.

19th- Called early; found him prostrated, extremities cold, pulse scarcely perceptible. ℞ Brandy—℞ Carb. Ammonia—℞ Sul. Quinine in succession;—pulse gradually rose. He suffered but little pain from this until his death, except when his bowels were moved.

20th. Tongue cleaning off. Continued stimulants and tonics in small quantities.

25th to 28th. Partial delirium—picking at the bed clothes—reaching in different directions as if to take hold of something—feeling about his person in search of his watch, &c.

29th. These alarming symptoms passed off, and he became perfectly rational and calm, and continued so until his death.

Nov. 8th. Growing weaker—difficulty of breathing. Eight P. M., pulse imperceptible at the wrist, extremities cold. Stimulants had no effect. Expired at 10 P. M.

Post Mortem Examination. Present, Drs. Earl, Bronson, Porter, and others.—On laying open the abdomen, the intestines on the left side were found to have been highly inflamed, and adhesions had taken place between them and a large cyst, which lay back of them. The intestines were separated from the upper portion of the cyst, thus bringing a portion of it to view. The color of the cyst was dark red—had about the appearance of congested liver. The form was that of a distended bladder, pressing hard against the left, anterior portion of the diaphragm, to which it firmly adhered, pushing forward and causing a permanent curvature of the lower ribs. In separating the cyst from the diaphragm, the sack was accidentally ruptured, and we were under the necessity of drawing off its contents. It contained from three to four quarts of a dark red fluid, which had the appearance of dirty blood and water—no offensive odor.

The sack was now separated from the parts to which it was attached, and its origin traced to the region of the left kidney. Here we found a long fleshy strip, about an inch broad in the widest part, half an inch in thickness and six or eight inches in length, forming a

part of the sack. This was, doubtless, once the kidney itself, as no other traces of a kidney was to be found on that side. The kidney on the right side was found in a healthy state, but about twice its common size. Spleen natural size, dark red color. No indications of disease in other organs, excepting those adjoining the sack, where they appeared to have partaken of inflammatory action.

A few particles of gravel were found in the sack, the largest about the size of a wheat corn.

Quere! What was the cause of the formation of this enormous cyst, which unquestionably commenced at the kidney?

Did it not arise from urinary calculus in early life, and these occasionally removed by the exertion of vomiting, until at length the passage became permanently closed, and the above fatal consequences were the result?

[D]

ON THE UNCERTAINTY OF THE COMPOSITION OF PHARMACEUTICAL PREPARATIONS, AND THE MOST ELIGIBLE FORM OF MEDICINES FOR ADMINISTRATION.

BY W. B. CHAPMAN, M. D., OF CINCINNATI.

The uncertainty of the purity and strength of remedial agents is a serious inconvenience to the practitioner of medicine, and one over which he has but little control, as he must depend mainly upon the druggist from whom he purchases his stock; and, although we have laws which require the inspection of drugs and chemicals that are imported into the United States, and which doubtless have operated beneficially in keeping from our markets large quantities of inferior articles, still much watchfulness is requisite to prevent sophistication at home by unprincipled dealers, whose only object is "to buy, sell, and get money; get it honestly if they can, if not, get it."

This is a subject of vast importance, and one which should engage more of the attention of the practitioner than it usually does, for how is it possible for him to do justice to his patient or himself whilst there is so much uncertainty in the quality of the agents he may wish to employ?

How are we to ascertain the purity of our articles? Most persons in ordinary mercantile pursuits may judge sufficiently of the quality of many articles of merchandize from mere superficial examinations; but not so with drugs and medicines.

Who is there that can say, from a casual inspection, whether the Iodide of Potassium of commerce does or does not contain from ten, fifteen or twenty per cent. of impurities, or that the Sulphate of Quinine has not been adulterated by the admixture of Salicine, Mannite, &c.; or that the powdered Cinchona bark is or is not mixed with the powdered Maricabo or Carthagena barks; or, lastly, that the powdered Rhubarb has not been made from black, rotten and wormeaten roots, those which were wholly unsaleable in the crude state, and which were colored and mixed with foreign material, so as to appear of the first

quality ? Then how are physicians to judge of their qualities when, even if they had the time to spare from their professional labors, they have not the necessary apparatus for such investigations ?

In our solicitude for obtaining articles of the best quality from foreign countries, the importance of having the pharmaceutical preparations of home manufacture equally as good, should not be overlooked. We have no guaranty of their being properly prepared, both as to the proportions and quality of the articles used in their composition but the integrity and competency of the manufacturer.

We have a Pharmacopœia, promulgated by a National Medical Convention, which meets every ten years at the City of Washington, for the purpose of making such alterations and additions as may be found necessary from experience; and this work should be the guide of every apothecary, and physicians should in all cases conform their prescriptions to it as far as practicable. In following it strictly no physician or apothecary can carry out the directions unless he is in possession of the right weights and measures. The troy, or apothecary weights, and the wine gallon and its subdivisions, are absolutely requisite in compounding, and should always be used, except when special mention is made to the contrary.

An instance or two may show more clearly what we are endeavoring to impress upon the minds of physicians. For instance, in the preparation of the Tincture of Opium, the directions are to take of Opium, in powder, two ounces and a half; of Diluted Alcohol two pints; macerate for fourteen days, express and filter through paper. Now two and a half ounces troy, or apothecary's weight are 1200 grains.

Two and a half ounces avordupois are 1093¾ grains.

Making a difference of 106¼ grains.

But as ordinarily prepared this is not all the difficulty. It will be observed that powdered Opium is directed. Opium, in drying, so as to admit of its being powdered, will lose, on an average, one-third of its weight; therefore, in using the moist gum in the preparation of the tincture only 740 grains will be employed, which is but a little over one-half of the requisite quantity. The object of having the Opium powdered is to insure a greater uniformity in the strength of the tincture, and to be more readily acted upon by the menstruum, than if permitted to remain in hard dry masses.

We will now cite an instance of a different character, viz: the preparation of Mercurial Ointment. The directions are,

Take of Mercury two pounds,
" Lard twenty-three ounces,
" Suet one ounce.

Rub the mercury with the suet and a small portion of the lard until the globules disappear, then add the remainder of the lard and mix.

Two pounds apothecaries weight are		11520 grains.
twenty-three ounces apothecaries weight are	11040	11520 grains.
one " " "	480	

That is, equal weights of fat and mercury.

Two pounds avoirdupois weight are		14000 grains,
twenty three ounces do	10062½	10500
one do do	437½	

Which shows an excess of 3500 grains, or half a pound avoirdupois weight, of Mercury.

These two instances should be sufficient to satisfy any person of the importance of strictly adhering to the prescribed rule.

As regards the administration of medicines: For the last few years the pharmaceutist and physician have been laboring to concentrate medicines, and at the same time to render the various preparations more acceptable to the palate of the patient. An infinite number of proximate principles have been produced, some deserving a trial at the hands of the physician, others no doubt may be considered almost useless; but amongst the new pharmaceutical preparations we believe that one of the best forms for the concentrated medicines of vegetable origin is that of *fluid extract*. We will state some of the objections which are urged against tinctures, decoctions, &c., and the advantages of fluid extracts over other preparations.

The objections to the administration of tinctures are that, in many cases, their long continued use in chronic affections is apt to result in habits of confirmed intemperance, together with the fact that the stimulating properties of the Alcohol frequently overbalance the benefit derived from the employment of the remedy. This is particularly the case where the dose of the medicine is large, as in the Compound Tincture of Gentian, Compound Tincture of Senna, &c. Another objection which is urged against them is, that when prepared with proof spirits or diluted Alcohol they undergo after a time the acetous fermentation, by the conversion of the Alcohol into Acetic acid, by the

catalytic influence of the nitrogenous matter in solution, and which greatly impairs the power of the agent. This is particularly the case with the tinctures of Senna, Rhubarb, Colombo, Hyosciamus, Digitalis, Cinchona, Hops, Aloes, and the Compound Tincture of Cardamon.

Decoctions, by the influence of the air and the mutual reaction of their components, decompose in a very short space of time, and if the active principle be volatile, it will be dissipated, thereby rendering it inert. Infusions, too, spoil very soon, especially in warm weather, and are subject to many of the objections urged against decoctions.

It is not an uncommon occurrence, in private practice, for a physician to direct an infusion of Rhubarb or Senna to be given to his patient—but instead of infusion, a decoction will be prepared, and probably "to get out all the strength" the root or leaves will be kept boiling for an hour or two, and the effect is obvious: instead of a gentle laxative, in the case of Rhubarb, you have a preparation of the opposite character, and the Senna will be found to possess all of its griping qualities in perfection, with very little of its cathartic powers.

Of the advantages of fluid extracts over the crude material it is hardly necessary to speak; the object is to separate the effete matter from the active principle by employing the proper menstruum in all cases as the solvent, and also to concentrate and have an uniformity of dose as far as practicable, which is a great desideratum, and can generally be accomplished better in this form than in any other.

There is another form of remedial agents we wish to mention in this connection, which should receive the attention of the physician, viz: that of "Saccharated Medicinal Powders"—a few remarks on which we copy from the "Annals of Pharmacy:"

"Some of the most useful of our pharmaceutical preparations are " those known as Tinctures, which hold in solution many of the most " active principles of vegetable substances. Yet as Alcohol, either " pure or more or less diluted with water, constitutes the greater " part of their composition, the frequent administration of this sub- " stance is occasionally open to serious objections, both on the part of " the physician and his patient. For this reason Dr. Becker recom- " mends the employment of Saccharated Medicinal Powders as substi- " tutes for Tinctures, whenever the latter may be considered objec- " tionable. He directs equal proportions of the Tinctures of Hellebore, " Cinchona, Hyosciamus, or of other vegetable substances, as the

" case may be, and sugar, to be well mixed together, and then evapo-
" rated, so as to drive off the Alcohol, and then to administer the
" residue instead of the Tincture. To this residue he gives the name
" of Helleborus Saccharatus, Hyosciamus Saccharatus, Cinchona Sac-
" charata, &c., &c., according to the drug made use of."

This mode of preparation of medical substances has attracted the attention of some of the medical authorities of our own country, for in reference to this subject the editor of one of the medical journals makes the following practical observations: "Supposing the " unimpaired medical properties of the Tinctures can be thus " fixed in these powders, (which is problematical) this mode of " administration would prove a great boon to physician and patient.— " Not only is Alcohol obviously mischievous in many cases wherein " the active principles of which it is the vehicle are indicated, but in " others, in which such contra-indication is not so apparent. It has " often proved a means of inducing a habit of dram-drinking, which " prevails even among respectable females to a far greater extent than is " usually supposed."

[E]

A NEW COMPOUND ANTIDOTE IN DOUBTFUL CASES OF POISONING.

BY CHARLES W. WRIGHT, M. D., OF CINCINNATI.

The diagnosis of a poison by the symptoms and history of a case is, in many instances, made out with difficulty, and sometimes not at all; and as the delay necessarily attendant on a chemical examination is always dangerous, and occasionally fatal, it has ever been a great desideratum to possess some general antidote or counter-poison.

The following mixture, it is believed, will neutralize a greater number of poisons than any hitherto proposed, and will be found of great benefit in anomalous cases, or where the physician is in doubt as to the nature of the poison that has been taken. Equal parts of olive oil and milk, in which has been incorporated about a table-spoonful of the gelatinous hydrate of magnesia, for each dose. When milk cannot be obtained, the white of egg, or flour and water, may be substituted. The quantity of oil and albuminous matter given at each dose will depend upon the severity of the symptoms, etc. The dose is to be repeated every ten or fifteen minutes, or oftener if there be vomiting, until relief is experienced, or the offending matter is dislodged. A mustard emetic will be found preferable to any other where this antidote is employed. The hydrate of magnesia may be obtained by precipitation from the sulphate, by the addition of a caustic alkali.

The following table contains a list of the principal poisons in which this antidote is efficient, together with the reaction that occurs, expressed in symbols.

TABLE OF POISONS AND ANTIDOTES.

		POISONS.	ANTIDOTES.
ACIDS.	*Oxy. Acids.*	Sulphuric, Sulphindigotic, Nitric, Chromic, Phosphoric, Arsenious, Arsenic, Oxalic, Citric, Tartaric, Acetic,	*Rationale.* SO_3 as the type. MgOHO+SO_3= MgOSO_3+HO.
	Hydracids.	Hydrochloric, Hydrofluoric,	*Rationale.* HCl as the type. MgOHO+HCl=MgCl+2HO
ALKALIES.		Potassa, Soda, Ammonia,	*Rationale.* *KO and Oleine as the type.* GlycOlc+KO=KOOlc+Glyc.
HALOID SALTS.		Bichloride of mercury,	*Rationle.* $HgCl_2$ as the type.
		Chloride of copper,	4Alb+2HO+$HgCl_2$=$HgO_2$2 Alb+2AlbHCl.
		Chloride of Zinc, tin, gold, iron, antimony,	*Rationale.* ZnCl as the type. MgOHO+ZnCl=MgCl+ZnO HO.
		Sulphate of copper, iron, zinc, mercury,	*Rationale.* $CuOSO_3$ as the type. 2Alb+$CuOSO_3$.=CuOAlb+ $AlbSO_3$.
		Nitrate of mercury, iron, copper, silver, bismuth,	*Rationale.* $HgONO_5$as the type. 2Alb+$HgONO_5$=HgOAlb+ $AlbNO_5$.
OXY. SALTS.		Arsenite of Potassa, soda, copper,	*Rationale.* $KOAsO_3$ as the type. MgOHO+$KOAsO_3$= MgOAsO_3+KOHO.
		Bitartrate of potash,	KOHOTrc+MgOHO=KOMg OTrc+2HO.
		Binoxilate of potash,	*Rationale.* KO2Oxc+2MgOHO=2MgO Oxc+KOHO+HO.

Tartarized Antimony,	*Rationale.* $KOSbO_3Trc+MgOHO=KOMgOTrc+SbO_3+HO.$
Acetate of copper, Lactate of copper, Acetate of zinc, Lactate of zinc,	*Rationale.* CuOAc as the type. $CuOAc+2Alb=CuOAlb+Alb\,Ac.$

The foregoing symbolical expression of the reactions that occur between the poison and the antidote, do not give all the changes that take place on bringing these substances together, but it is hoped they will be sufficient to convey a tolerably correct idea of the modus operandi of the antidote.

[F]

REPORT OF THE COMMITTEE TO AWARD THE CLEVELAND PREMIUM.

The Committee to whom was assigned the duty of examining the Essays presented for the premium, which was propounded for the best Essay on a Medical or Surgical topic, by the Ohio Medical Society, at its session in the city of Cleveland, June, 1852,—*Report*, That they award the Premium to SAML. G. ARMOR, M. D. for his Essay upon the "Zymotic Theory of Essential Fevers, &c.

CLEVELAND, O.
July 11, 1853.

JARED P. KIKTLAND,
JNO. DE LA MATER,
JNO. DAWSON,

PRIZE ESSAY,

ON THE

Zymotic Theory of Essential Fevers and other disordered conditions of the Blood; together with an Appendix on Medical Theories and Vital Statistics.

BY SAMUEL G. ARMOR, M. D., of Cleveland, Ohio.

"I PROFESS A LIBERAL MEDICINE: I AM NEITHER OF THE OLD SECTS NOR NEW, BUT FOLLOW WHEREVER THEY CULTIVATE TRUTH."—Klenius.

There are few inquiries in pathological science of more interest than those which relate to changed conditions of the Blood; for whether we regard it as endowed with a distinct vitality, and obedient to the general laws of cellular growth, development and decay; or as ministering to the nutritive and textural wants of the system in the elaboration of fibrin from elements furnished by primary assimilation; or as connected with important chemical changes essential to a healthy action of the system;—whether we regard the blood as contributing to one or

more of these purposes in the animal economy, it becomes at once evident that destruction of its vitality, or change in any of its constituent elements, must be followed by serious constitutional disturbances. Hence the interest with which its diseases should be studied, and the importance of understanding, in a curative point of view, the primary or secondary impression of disease upon this fluid.

It must be confessed, however, that the question of *priority* or *sequence* although of much interest to him who thinks or reasons about the nature, origin and phenomena of disease, is often one of difficult solution. But to arrive at greater certainty on this point, if possible, so far at least as relates to the Essential Fevers, is the object of this Essay: and if I shall succeed in any degree in pointing out the distinction between *symptoms* of diseased action and *diseased action itself*, I will have, to some extent at least, accomplished my object.

In M. Andral's classification of Lesions, in which he makes *all* disease to exist, he embraces some in which no *notable* change of either *organization* or *composition* can be detected. Yet it is worthy of inquiry as to whether this eminent pathologist has not included in his lesions, some which are but *symptoms*, not properly diseases—*actions* and not *states*.

It is not my purpose, however, at present, to enter this field of inquiry. I desire to call attention to another question in which no such controversy can arise.

In the Essential or Idiopathic forms of fever it is evident that change has been induced in the blood by the admixture of *foreign matters*: The proof of this consists in the fact: 1st, That diseases analagous to those fevers have been induced by injecting putrid matter into the veins of animals: 2nd, These fevers are readily produced by the introduction of animal poisons into the blood, as in the case of small pox, measles, &c.: 3d, These poisons are known to operate through the medium of the air, by thus gaining access to the blood through the lungs: 4th, The non-contagious fevers, such as Intermittents and Remittents, are universally admitted to depend upon a poisoned or changed condition of the atmosphere: 5th. Actual observation establishes the fact that the blood *is* altered in all Essential or Idiopathic fevers.

The best point of departure, therefore, is the general fact (for it should be regarded as such), that all Essential fevers depend *primarily*

on a poisoning of the Blood, and the proof as to primary impression will be given in illustration of the facts already cited.

It must not be inferred, however, that I am laboring to establish the *identity* of fevers. No such inference can be legitimately drawn from any fact or reason which I shall present. True, so far as the general fact is concerned that all foreign matters, when introduced into the blood, change either its physical, chemical, or vital properties, all Essential fevers may be regarded as a *unit:* Yet observation abundantly establishes the fact that different poisons act differently on the human constitution, and upon the peculiar and specific character of each depends not only the destructive effect on the blood, but the local lesions that will ensue. Urea and its componnds, if retained in the blood, affect the brain and nervous system, and are apt to give rise to a low grade of inflammation in serous and sero-fibrous tissues; while mucous structures will suffer but little. But the small pox virus spends its force upon mucous and cutaneous structures, and leaves, unharmed, the serous and fibrous structures.

There can be no explanation given of this other than the general fact that the tissue or viscus affected seems to be that which has an affinity for the poison which has to be elimenated from the blood. In this process of elimination, inflammation and its sequela are excited, and local disease becomes manifest. Hence all Essential fevers should be regarded as distinct in species *according to the circumstance of the primary sedative impression.* This is the only true and rational classification of fevers.

We feel authorised in asserting, then, as a starting point in our reasonings,—what observation abundantly establishes,—that each specific miasm has its own peculiar and distinct law of development. But in the absence of reliable information as to the *essential nature* of these miasms it would be idle to speculate. Our knowledge on this point, must, at least for the present, rest on observation.

But it will be at once perceived that our knowledge of the action of remedial agents is not more certain. Indeed the perfect analogue of one is found in the other, and the reasoning applied to one applies with equal force to the other. Thus, that Mercury will excite inflammation of the salivary glands; Arsenic, the mucous structures; Belladonna, the skin; Ergot, the uterus; &c., has long been a matter of observation. But *why* they should do so is just as obscure

as why the Typhoid poison should select for its destructive action the glands of Peyer, or the Small Pox poison should spend its influence upon the dermoid structures. The articles of the Materia Medica furnish a just illustration of the action of all foreign substances in the production of disease. Mercury, Arsenic or Croton oil, if uncontrolled by the judicious skill of the physician, is capable of giving rise to diseased action with as much certainty and as varied in its manifestations, as either of the animal poisons to which I have alluded; and analogy would lead us to suppose that if we could *control* the one, as we can the other, miasmatic poisons might be used as therapeutic agents. That all agents that affect the vitality or composition of the blood, bear certain general pathological relations, cannot be doubted: but that by no means proves the doctrine of identity. As well might we assert the identity of Small Pox and Typhus fever from the fact that the fibrin of the blood is found defective in both.

An important point, however, to be established, before conclusions are drawn, is the fact that the blood does undergo change in disease, and from medication, diet, &c.; for if this be denied, our conclusions will be without a predicate, and therefore unsound. But the chemists, have, happily, settled this point by furnishing us accurate analysis of the blood both in health and disease. In the condition of health the venous blood of a man, as represented by the number 1000, is composed of

Serum - - - - -	869.1547
Globules (fibrin included)	130.8453
	1000

This varies, however, according to sex, age, temperament, kinds of food, evacuations, &c. The rapidity with which some of the solid constituents of the blood are diminished by blood-letting, for example, is very remarkable. Thus, according to the researches of Dumas, the blood of a robust young man of 23 years of age gave:

At the first venesection,

Water, - - - - - -	780.210
Globules, - - - - - -	139.129
Albumen, Salts, Fatty and extractive matters,	80.661
	1000

At the third venesection,

Water,	853.46
Globules,	76.19
Albumen, Salts, Fatty and extractive matters,	70.35
	1000

The more solid constituents of the blood, it will be seen, are rapidly supplied by a compensating quantity of non-sanguinous fluid; and hence the value of blood-letting when it is desirable to promote absorption.

Diet and drinks also very readily affect the constitution of the blood. According to M. Dennis, in the blood of a young man of 21 years of age, were found:

Water,	770
Globules,	154
Albumen, &c.,	76
	1000

And after 40 days use of watery drinks:

Water,	804
Globules,	111.9
Albumen,	84.1
	1000

It will be thus seen that the blood is very readily changed in its constitution by blood-letting, diet and exercise. It sustains direct relations also, to the air we breathe, to the water we drink, to the food we eat, and to the excretions of the body by which it is purified: and that a fluid which is presented to us in such a compound and complicated form, and sustaining so many relations to the various modifying influences which surround it, should not become a frequent seat of *disease*, would be indeed an anomaly in nature.

Among the various hypotheses to account for fever, a Zymosis, or fermentation of the Blood, has prevailed under one form or other from a remote antiquity. But it has been so inseparably connected with the old Humoral pathology that it has received little consideration. Recently this hypothesis (for I shall regard it as such at present) has been rendered, to say the least of it, very plausible by the researches of the distinguished Liebig.

In his "Animal Chemistry" he calls attention to the fact that no other component part of the organism can be compared to the Blood in respect of the feeble resistance it offers to exterior influences, and the reason assigned is, that "it is not an organ which is formed, but an organ in a state of formation." The following quotation embodies in a few words, the main leading thought of the author on this subject:—

"The Chemical force and the Vital principle hold each other in such perfect equilibrium, that every disturbance, however trifling, or from whatever cause it may proceed, effects a change in the blood."

This, then, is an important starting point in our reasoning process; for if it be really possessed of a low vitality, we may logically arrive at the conclusion, by an *a priori* argument, if we knew nothing of the facts, in confirmation of it, that all fevers, produced by endemic, epidemic, or infectious causes, have their origin in a primary diseased condition of the blood.

A Zymotic change of the blood is due, according to Liebig, to a decomposing organic molecule in the interior of the human body. This molecule, by a law of catalysis, induction, or contact, has the power of imparting its own motion to another molecule with which it may be in contact. Hence chemists have defined it to be "decomposition by contact," or the "action of presence." We have illustrations of this law in the power which small quantities of substances, in a state of change, possess of causing unlimited quantities to pass into the same state: and it is an interesting fact, worthy of note in this connection, that all substances which readily suffer this transformation are, without exception, bodies which contain *nitrogen*. A large portion of the blood being composed of this element, we might readily conclude that it is the vital principle alone that keeps it from spontaneously passing into this condition of transformation. If the catalytic force be greater than the resistance offered by the Vital principle, the blood must pass into a condition of decomposition.

It may be asked, however, with reference to this law of Zymosis or induction: Is there any evidence to show that the introduction of putrid matter into the animal system does give rise to effects which are at all comparable with those of fever? If not, the law which has been announced, is but a speculation, and at best an hypothesis. But let us see. "It is a fact," says Leibig, "that subjects in anatomical theatres frequently pass into a state of decomposition which is communi-

cated to the blood of the living body." And the fact observed by Magendie, that putrifying blood, brain, eggs, &c., laid on recent wounds, cause vomiting, lassitude and death, after a longer or shorter interval, has never, as yet, been contradicted. Numerous experiments have demonstrated that putrid matter injected into the blood of healthy animals, will give rise to a set of symptoms which are very analagous to Typhus. "If a small portion of putrid matter," says Dr. Armstrong, "be accidentally introduced into the blood during dissection, or if the experiment be made upon the lower animals, it produces fever, having exactly the characters of Typhus under its continued form, and *no individual could confidently pronounce that it differed from it.*" Bernard has also shown that by injecting yeast or sugar into the circulation, many of the ordinary kinds of fermentation are excited, giving rise to a disease very analagous to Typhoid fever, accompanied by prostration of strength, bloody fluxes, ecchymosis, and a black and uncoagulated condition of the blood. "Lastly, it is," says Liebig, quoting from Henle, "a universal observation that the origin of epidemic diseases is often to be traced to the putrefaction of large quantities of animal and vegetable matters; that miasmatic diseases are endemic in places where the decomposition of organic matter is constantly taking place, as in marshy and moist localities; that they are developed epidemically under the same circumstances after inundations; also in places where a large number of people are crowded together with insufficient ventilation, as in ships, prisons, and besieged places."

It is also worthy of note that these factitious fevers, produced by the introduction of deleterious substances directly into the blood, are analagous, both in their symptoms and pathological lesions, to those produced by the sting or bite of certain animals; they present, also, the same general class of symptoms that are present in Small Pox, malignant Scarlatina, and other eruptive diseases.

In Mr. Walker's work on Grave Yards, he also presents an array of facts which prove beyond all controversy that putrid animal exhalations have given rise to diseases that have raged like a pestilence or epidemic. He cites an instructive instance which occurred in 1733, at the parish of St. Saturnine, in Burgundy. A sexton, while letting down a corpse into the vault, accidentally broke a coffin which contained the body of a fat man that had been buried twenty-three days.

A discharge of sanies followed, which greatly annoyed the assistants; and, "of one hundred and twenty young persons of both sexes, who assembled to receive their first communion, all but six fell dangerously ill, together with the *Cure*, the grave digger, and sixty other persons." The disease is described as a putrid, verminous fever, accompanied with hemorrhage, eruption and inflammation.

Facts in support of these views might be accumulated at great length. Dr. Francis Home communicated measles by means of a drop of blood from a patient affected with the disease. And the experiments of M. Gendrin, as given in Williams' Principles of Medicine, is a striking one in point:—"A man who had been skinning a diseased animal was seized with a putrid fever, attended with an eruption of sloughing pustules. Some blood taken from this man was injected with the cellular texture of the groin of a cat; the animal was soon after affected with vomiting of bile, dyspnœa, frequent, small and irregular pulse, dry, brown tongue, slight convulsions, and died seven hours after the injection." The same pathologist induced in animals various and severe symptoms, followed by death, by injecting into their veins the blood of persons laboring under Small Pox. M. Dupuy and Lauret also communicated the malignant pustular disease known as "Charbon," by injecting into the veins of the healthy horse a minute quantity of blood of the diseased animal. Andral relates an extraordinary case in which a malignant fever, followed with pustular eruption and death, was occasioned by the mere contact of the lips with the diseased blood of an animal.

May we not, then, infer from these facts that the blood is the hot bed in which many malignant diseases are propagated, whether by ova, parasites, cellgerms, or zymotic action?

But our proof does not rest here. Clinical observation has long since established the alteration of the blood in diseases which are termed *putrid:* the blood appears to be in a partial state of *dissolution:* its vitality is destroyed, and its fibrin either not elaborated, or dissolved in the process of putrefaction. As a result of this decomposition an increased quantity of hydro-sulphate of ammonia has been found in the blood of patients suffering from Typhus and other malignant diseases; and hence the *alkaline* reaction of the urine that is so often observed to be present in these fevers.

These observations have been made the basis for the support of a

great group of maladies which go by the name of Zymotic diseases, and include, according to the statistical nosology of Mr. Farr, small pox, chicken pox, all eruptive diseases, influenza, scurvy, purpura, ague, remittent fever, yellow fever, typhus, puerperal, plague, hospital gangrene, &c. And in proof of their Zymotic origin the fact has been offered—1st, That the vitality of the blood is low, and that it therefore readily suffers transformations; 2nd, That we can produce in animals and man factitious diseases by inoculations or injections of putrid or contagious matter, having all the characteristics of the Essential fevers; and 3d, That Clinical observation establishes the fact that the blood is changed. And that the febrile phenomena present in these fevers indicate a condition of the system independent of inflammatory action, I infer from the fact—1st, That, in the absence of complication during the progress of the disease, there is no evidence of inflammation revealed by post mortem inspection; and 2d, That the symptoms co-exist with a diminution of the fibrin of the blood, and diminished tolerance of the loss of blood. In some of the most malignant forms of fever—those in which the fibrin of the blood is at its minimum—there is often not much heat of body, and but little increase of pulse. The patient often dies in the cold stage of such fevers, without, in fact, having any fever! Evidently, therefore, the term *fever* may be used in two very different senses—in one signifying a collection of symptoms depending on local inflammation—and in the other a *condition* of the system entirely independent of such inflammation. In one the term indicates the name of a *disease*, and in the other the name of a *symptom*. Hence the distinction between Essential and Symptomatic fevers, and hence the inference, also, that the Essential fevers have their origin in certain qualitative changes of the blood, caused by the introduction of foreign matters.

Further proof that the general class of diseases which have been termed Zymotic have their origin in the blood, is drawn from the symptoms usually present. These will be found accurately detailed by all standard writers on General Pathology, under the head of "*Necraemia, or death beginning with the blood,*" such as petechiæ and vibices on the external surface, the occurrence of hemorrhage in internal parts, the general fluidity of the blood, its frequently dark and otherwise altered aspect, its proneness to pass into decomposition, the general prostration of all the vital powers, the dark tongue, sordes

on the teeth, suspended secretion, and the general arrest of molecular nutrition. Indeed, the very *universality* of diseased action points to a cause more general than can be found in any individual function.

I have thus far spoken of admixture of foreign elements in the blood from *without*. There are causes, however, which operate upon it *intrinsically* as well as *extrinsically*. Thus, defective excretion is followed by a direct *backward* action on the blood, resulting in changes of its chemical or vital properties. The excretory organs are the natural emunctories through which effete matters, generated within the organism, are expelled from the blood: the product of the various excretions may be regarded, therefore, as the correct expression of the numerous changes that are taking place both in the healthy and diseased animal fabric. In febrile diseases these organs are generally suspended in the exercise of their healthy function, an increase of perspiration, or in the flow of urine, or a spontaneous diarrhœa being generally accompanied with a subsidence of the febrile phenomena.

Relatively considered, the *Kidneys* may be regarded as the most important emunctories through which morbid matter is expelled from the blood. The experiments of Orfilla on this subject are highly satisfactory. He found that the pernicious effects of small and repeated doses of arsenic could be readily averted in animals by giving them, at the same time, a diuretic medicine; and the converse fact has been frequently observed, namely, that persons who suffer from disease of the kidney, by which its function is impaired, very readily contract infectious diseases, and are apt to suffer from their effects. It has also been observed that opium, arsenic, mercury, &c., operate with dangerous energy on such patients.

The experiments of Dr. Golding Bird are very conclusive on this subject. His observations have been extensive and accurate. Two of many cases, are here given. In the first, a case of ague, the patient was kept in the Hospital from the 23d of May to the 16th of June, following.

The following is his table of analysis:

May	23rd.	Passed	12	ozs.	urine	and	352	grs.	solid	constituent.
"	26th.	"	40	"	"	"	828	"	"	"
"	28th.	"	35	"	"	"	725	"	"	"
"	30th.	"	48	"	"	"	1054	"	"	"
"	31st.	"	45	"	"	"	743	"	"	"

June	2nd.	"	35	"	"	"	514	"	"	"
"	4th.	"	30	"	"	"	879	"	"	"
"	6th.	"	27	"	"	"	1036	"	"	"
"	7th.	"	35	"	"	"	436	"	"	"
"	9th.	"	40	"	"	"	1172	"	"	"
"	11th.	"	45	"	"	"	742	"	"	"
"	13th.	"	40	"	"	"	916	"	"	"
"	14th.	"	43	"	"	"	984	"	"	"
"	16th.	"	37	"	"	"	1044	"	"	"

There was a decided improvement, says Dr. Bird, on the 30th, severe paroxysm on the 3d, better again on the 6th, and no return of the ague after the 9th.

In the second case of ague—girl aged 19—patient was kept in Hospital from 23d of May to June 7th. On the 23d of May there was a severe paroxysm, and the amount of solids excreted was 280 grs. On the 27th she had a return of paroxysm and there were 280 grs. solid constituents in the urine. On the 28th she was better, and the solid constituents amounted to 538 grs. On the 30th they amounted to 625 grs., and from this time the patient rapidly got well.

In this, also, it will be observed that *pari passu* with the patient's improvement there was an increase of the solid constituents of the urine. In Typhus and other adynamic forms of fever, the same facts have been observed.

Are we to infer, however, from these observations, that defective excretion is the primary *cause* of the fever? By no means. That would be an imperfect view of the pathology of these fevers. I can conceive of no instance in which a lesion of secretion can be properly classified among the *primary* elements of disease. Some change must precede it, either of structure, of innervation, or of the blood from which the secretion is formed. The examples cited simply show the curative effects of the removal of foreign matters from the blood by means of depurating organs, and at the same time go far towards establishing the ancient doctrine of *critical discharges*.

They also serve to point out the two causes of disease which constantly present themselves for our consideration—causes *extrinsic* and causes *intrinsic*. Of these one or both may be in active operation.—It is an erroneous dogma to suppose that but one poison can act on the system at a time. As rational would it be to suppose that but one

medicinal agent can produce its effects upon the constitution at a time.

I have already alluded to the fact, demonstrated by observation, that different poisons spend their influence upon different tissues of the body. Is it an unwarrantable speculation to transfer this law of *specific contamination* to the structure of the blood, and thus explain the action of different foreign bodies upon that fluid? Some poisons may be regarded as comparatively innoxious; they emerge from the body unaltered, with one or more of the ordinary secretions: others destroy some element of the blood (or its corpuscular element in the lymphatic glandular system,) so that it is never again susceptible to the action of the same poison, as in the case of some of the eruptive and contagious diseases; while others, by entering into chemical union with one or more elements of the blood essential to life, destroy its vitality and general necræmia and molecular death soon follow.

This will be recognized as an unproven speculation of the old fashioned Humoral Pathology. And, in the absence of positive proof, I do not, of course, offer it as one of the "fixed facts" in Medical Science. Yet observation, reason and analogy throw around it a *plausibility* that entitles it to still further investigation.

In submitting these views I would not be understood as attempting to sustain an exclusive Humoral Pathology; nor would I underrate the importance of pathological changes in the solids. With Bichat, I regard "every exclusive theory, whether of Humoralism or Solidism, as a pathological absurdity." The relation between them is too direct and intimate to be ever separated; neither can the one or the other ever be regarded as an "exploded" system. Humoralism will never be exploded as long as the blood is the source of life to the tissues of the body; nor will Solidism be disregarded as long as the tissues continue to undergo change from altered conditions of the blood. My object is rather to fix the mind upon what I regard as an important truth, viz., that in all Essential or Idiopathic fevers, changes of the solids depend on previous alterations (quantitative and qualitative) of the blood.

This altered condition of the blood is soon made manifest by general febrile phenomena. The nervous centres, depending for their powers directly upon the state of integrity of this fluid, become perverted and weakened in action; the functions of animal and organic life are depressed; passive congestion, induced by depression of nervous power,

follows; and hence the torpor and arrest of glandular action, and the sluggish and languid state of all the functions so characteristic of these fevers.

The importance of all these conditions I would by no means underrate. They present to us, indeed, an exceedingly interesting field of inquiry. From an impression first made upon the nutritive and assimilative functions, we are at once introduced to multiplied elements of disease. There is not a function, not a nerve, not a gland, not a capillary vessel of the body but must feel the depressing effects of a contaminated condition of the blood. And this sluggish and languid state of the excretory organs becomes the cause of a still more poisoned condition of the blood, until this source of life becomes itself dead, and spreads death instead of life throughout the body.

The admittance of the Zymotic theory into the field of pathology would doubtless lead to greatly increased knowledge of the real nature of diseased states. In a large class of fevers it points out the only two modes of cure: 1st. To counteract the injurious operation of the poisons: 2nd. To expel them from the system. The first of these indications is carried out in low typhus and adynamic forms of fever by the administration of saline medicines, such as the chloride of sodium, the chlorate of potash, hydro-chloric acid, &c. Arsenic, quinine, alcohol, and other antiseptic remedies are also valuable agents in arresting the Zymotic condition of the blood.

The other indication is the one most usually pursued; viz., to expel the offending matters from the system. This may be said to be Nature's mode of cure; and in the absence of reliable knowledge as to the nature of the poison and its antidote, the physician can only aid nature in her work of elimination. This he attempts by the administration of tonics, stimulants, supportants and depurents. The powers of life must be supported while Nature effects the cure. But even in her own work of depuration Nature may be greatly aided. The kidneys, skin, and alimentary canal are the principal channels through which foreign matters are expelled from the blood; and hence the utility of diuretics, aperients, and the so-called *Water cure*. The latter, by a combination of diuresis and diaphoresis, may be rendered a most powerful therapeutical agent in cutting short a fever in its premonitory stage, or at its final accession. The absurdity of hydropathy, one-ideal system of cure, is its blind and indiscriminate applica-

tion to every variety of disease: and it is to be regretted that a remedy of such valuable therapeutic power is frequently brought into undeserved disrepute by falling into the hands of ignorant intermeddlers with nature.

If the views of the pathology of Essential fevers which I have presented, be correct, it is almost impossible to avoid giving assent to the doctrine that regards the fever as an effort of the "vis medicatrix," instituted for the purpose of expelling the poison from the system; and, while it repudiates the doctrine of the boasting fever curer, as well as the doctrine of non-interference, which has been aptly styled a "meditation on death," it rests upon the great physiological truth, that Nature is ever active in her recuperative powers, and is after all the best and wisest of physicians.

This pathology also offers the most rational explanation of the modification of diseased action growing out of prevailing *Epidemic influences*. It fixes the mind upon two controlling elements of disease; *first*, upon the depressing effects of a Zymotic poison by inducing changes in the blood; *second*, the local inflammatory or functional complication that may be engrafted upon and influenced by this altered condition of the blood. It thus draws the line of demarcation between general and special pathology, by keeping in view *constitutional conditions as modifying local action*, and by this means enables us to comprehend the most important question, practically considered, within the wide range of medical inquiry—the distinction between *Sthenic and Asthenic* diseases, between depressed and exalted action. Its tendency is to give us broader views and clearer conceptions of the varied elements of disease as they act and re-act, and insensibly shade into each other.

It modifies, moreover, and renders more rational, the *treatment* of disease. Does an inflammatory affection overtake one whose blood is contaminated by an epidemic influence, or by putrid emanations, vegetable or animal; or whose blood is only imperfectly or badly repaired by insufficient or unwholesome diet?—then, of course, the inflammation is *asthenic* in character, and blood-letting and other antiphlogistic remedies must be resorted to, if at all, with great caution. If the blood has been "touched corruptibly" by an epidemic influence, or a typhoid poison, we must husband rather than depress the flagging powers of life. To adopt, in such cases (as we fear is too often done), the ordinary treatment for an acute pneumonia or dysentery, as the

case may be, regardless of the evidence of *blood disease*, such as loss of tone and strength of the vascular system, sluggish functions, dull mental faculties, feeble and compressible pulse, and brown or dark tongue, would be to hasten the dissolution of the patient, and bring both doctor and medicine into disrepute. The great secret of success in the treatment of disease is to be found in a broad, comprehensive and rational pathology,—a pathology that weighs every element of disease, whether of fluids or of solids, that is capable of exciting, depressing, or perverting vital actions.

I have thus ventured to present a few facts with the hope of calling attention to a subject which may not, as yet, have occupied the minds of some members of the profession: and although I may have presented but a dim vision of the true light, yet "I TRUST I HAVE GOT HOLD OF MY PITCHER BY THE RIGHT HANDLE."

MEDICAL THEORIES.

The history of Medical Science is the history of Medical theories: and, although many of them appear to differ widely with each other, these differences will be found, on examination, to be more apparent than real, often more in words than things, and *incomplete* rather than *false*. The subject which I have presented in the foregoing Essay, is now attracting the attention of some of the best medical minds of Europe; and yet pathological changes of the blood is an *old* doctrine, —old as the history of Medical Science. The Zymotic Theory of disease has existed, under some form, since the days of HIPPOCRATES; and a lapse of two thousand years has but confirmed many of his views. True, he was a Humoral pathologist in the fullest sense of the term; yet his pathology of disease, although simple, was the result of close observation. He taught that disease consisted in a morbid state of the fluids, and that Nature cures by certain evacuations, as of sweat, urine, &c. Who doubts his doctrine at the present day? Who can gainsay his facts? But Hippocrates did not see the *whole truth*. He failed to estimate the importance of a healthy *equilibrium* of the blood. This was left for Themison, who, not taking an enlarged view of the varied elements of disease, made capillary congestion embrace almost the whole domain of pathology. One dealt with changed *qualities* of the blood, the other with its changed *quantities*, and each taught an important truth. So also Brown, the "child of genius and misfortune," was so enraptured with one or two truths that he was never able

to see any others; and although simple *over-action* and *under-action* frequently attend disease, they constitute but fragments, as it were, of a more perfect pathology; and the lancet and the brandy bottle, although good in their place, constitute a very incomplete magazine of therapeutics.

Thus it has been from the days of Hippocrates to the present. The most brilliant lights that have gilded the skies of medical philosophy, have taken partial views of subjects in their nature and extent complex and vast. Yet one has contributed a truth in physiology, another in pathology, and still another in therapeutics. The accumulation of these has greatly enriched our medical literature, and enlarged the boundary of our knowledge. We now have spread out before us the ingenious and truthful inferences of a Laennec, an Andral and Gaveret: the patient and philosophical researches of a Golding Bird; the practical truths of a Williams and a Watson; and the clear and comprehensive conclusions of a Forrey based upon the comparative statistics of more than three fourths of the earth's surface.

The object of all research has been to arrive at the best, the true theory; and yet, amidst our vast accumulation of facts, we may well stop and enquire: Has a true and complete theory of Medical Science been established? Surely no rational mind can so claim. If not complete, then, what is our relation to the past? In the rejection of old and the establishment of new theories, have we made progress, or have we not? If the world has not been benefitted by these inquiries, and the aggregate duration of human life has *not* been lengthened, then there has been really *no* progress, and the zealous medical inquirer might well turn, in despair, from any further investigations. But if it shall prove that amidst all this conflict of opinion and theory, there has been a regular and steady progress in the establishment of those medical truths upon which the science at present rests, it will be an inducement for us to set out on a fresh voyage of discovery with new hopes and energies. Haply *we* may return from our explorations the possessor of a new truth as a contribution to our divine art.

The fact that many a speculative theory has fallen before the rigid test of *inductive truth*, should not discourage us from making renewed efforts. Does it not prove, on the contrary, that we to-day occupy an advanced position in the healing art that we never before occupied? Truths have been preserved and errors have been discarded; the *chain*

of authority has been broken, and the medical philosopher enquires for neither sect nor theory, but for TRUTH. Chemistry and the microscope are at this moment making rapid acquisitions of new truths and explaining old ones. It is a disingenuous and false charge, therefore, that Medical Science is stationary. In no department of human inquiry has there been greater progress: and in confirmation of the proposition that MEDICAL SCIENCE HAS MATERIALLY LENGTHENED HUMAN LIFE, I introduce, in conclusion, by way of Appendix to my Essay, the following statistics, bearing on this point, which I extract from the Annual Address recently delivered before the New York State Medical Society, and the Legislature then assembled in Albany, by ALONZO CLARK, President of the Society, and the distinguished Professor of Physiology and Pathology in the College of Physicians and Surgeons of the State of New York.

It is seldom, indeed, that we have condensed such an array of facts and figures bearing upon this point, and I am glad in this connection to avail myself of his labors.

VITAL STATISTICS.

Professor Clark first introduces the testimony of the great English historian, and proves by an unanswerable array of testimony, that medical science *has* greatly lengthened human life.

Macauley, in his history of England, says: "The term of human life has been lengthened in the whole kingdom, and especially in the towns. In the year 1685, not accounted a sickly year, more than one in twenty of the inhabitants of the capital died: at present only one in forty dies annually. The difference between London of the 19th century, and the London of the 17th century, is greater than the difference between London in ordinary years, and London in the cholera."

Dr. Simpson, in his paper "On the Statistics in Surgery," states, that in 1786 the yearly rate of mortality in the whole of England and Wales was *one in forty-two;* in 1801, it was *one in forty-seven*, and in 1831, it had diminished to *one in forty-eight*, showing a reduction of annual deaths by 28 per cent. in the short period of half a century. [Dublin Rev. vol. 7, p 97.

These statements correspond with deductions from the English parish registry returns, made by a careful student of statistics and distinguished writer of our own country, published in the 13th vol. of the American Journal of Medical Sciences. This registration, how-

ever, is incomplete, and the American writer points out the sources of this defect. It is not necessary to specify them here. They are believed to be constant, and nearly equal for the whole period; so that while the proportion of deaths to survivors is rated too low, the rating is equally too low for all portions of the half century. The error therefore, does not materially invalidate the great conclusion to which Dr. Simpson's figures would lead us. Marshall, in the publication of the bills of mortality, preserved in London since 1629, has given us the fullest confirmation of this gratifying fact, so far as this largest of towns can furnish it. Finlaison recognises it as an important element in the construction of his celebrated Annuity Tables.

Mr. Milne, in making up his well known *Carlisle* Life Tables, ascertained with the greatest care the deaths in that town and its vicinity, for the nine years following 1778: they were in the proportion of 1 to 39.99 of the population of each year. It is ascertained with equal certainty (see Registrar General's Reports) that for the seven years, ending with 1844, the deaths in this same Carlisle and its vicinity were annually 1 in 52.6. The interval between these two periods is just 50 years, and the reduction of mortality is 22 per cent.

The deaths in the town of Northampton were carefully studied during the latter part of the last century, and compared with the population. Dr. Price made this comparison the basis of some of his life tables. Here we have another unquestionable increase in the duration of life. The Registrar General, in his Report for 1847, says of this town: "In the last century, the people here lived about 30; now they live 37 years (37½). In earlier times their life must have been shorter. Then the community had no skilful physician, no surgeon—an infimary, a dispensary, a lunatic asylum, and from 20 to 30 educated medical men, an evidence that more skill is now devoted to the preservation of life." Thus it appears that although this Northampton is even now one of the least healthful of all the smaller towns of England, yet that the decrement of deaths there is equal to 23 per cent.

These statements, I believe, exhaust the reliable statistics of England, bearing on the subject in which we are here interested, excepting only those that relate to annuitants and the insured.

The inquiry now naturally arises, is this the end? Can the life of man be still further prolonged? We would fain hope that its maxi-

mum duration is not yet attained, and this hope is not without encouragement. We learn from the Registrar General's Report, that the mortality of England was slowly but steadily diminishing, during the eight years from 1838 to 1846. The figures that represent its ratio to the living are for the several years respectively as follows, viz: 2.24, 2.187, 2.29, 2.160, 2.167, 2.12 and 2.082 per cent. But whatever view we are compelled to take of the future, who can doubt the cheering evidences of progress in the recent past?—substantial progress. I will adopt the suggestion of the Registrar General, and assume for the present, what I hope soon to prove, that what man desires most of all earthly things, is secured to him in fair measure, by the unobtrusive, unnoticed labors of our ill-rewarded profession. In the lapse of half a century, 28 persons, or if you prefer the lower estimate, 22 persons saved alive out of every hundred, all of whom must previously have perished! What are all the other improvements of the same period, compared with this? What, though we boast that steam has been made the day laborer for the nations: what, though the steamship equals in magnificence the fairy palace of fiction, and skims the water with its wooden wings, as does a bird the air; what, though the iron ways encircle the earth, and daily exhibit, as I believe they do, the highest reach of human power, a perpetual wonder; what, though the electric fluid has become our news-carrier; what, though the arts have improved so as to cheapen many of the necessaries of life to half their original cost! Neither of these, nay, all combined, can hardly single out the life that they have saved!

Again, France exhibits to us very strikingly the great results of professional labors. M. Charles Dupin, whose name is a sufficient guarantee for his statements, lately read before the Institute a paper on the vital statistics of that country, showing that from 1776 to 1843, (67 years), the duration of life had been increasing at the average rate of 52 days annually, so that the total gain in ⅔ of a century amounted to 9½ years; and that in no year of that period, whether during the Republic, the Consulate, or the Empire, did the annual increase fall below 19 days. What a fact have we here! Even during that dread period of French history in which the death angel assumed the cap of liberty, and taxed the arts for new inventions to destroy life, and during the succeeding 13 years in which the war spirit reaped an almost unprecedented harvest when science and arts vied with each other in

contributing to this work of slaughter, and the history of Europe is but little more than the history of battles: during all this period, medicine alone lent all its energies to the preservation of life. How striking the contrast! How proud the success! In France, that glutted the guillotine with the blood of her sons, and strewed every battle field in Europe thick with their dead bodies; even in death-smitten France, medicine saved, in 20 years, more than war and the delirious spirit of freedom could destroy.

But we shall be told, doubtless, that we are claiming for our profession more than we have any fair right to; that society has improved in all its relations, and that to these improvements are due, in a fair proportion, the results which have been quoted. Let us consider for a little in what these improvements consist. Within 150 years, the arts have reduced the costs of many of the necessaries of life; but then the necessaries of life have been actually multiplied by this same process of reduction, and food, the first of necessaries, has not been cheapened: its money price is indeed less, but its labor cost is greater. The home condition of the laborer (I speak only of the countries from which I have drawn statistics) is more miserable than it was a century and a half ago. The rich have, it is true, become richer, but the poor have at the same time become poorer; in other words, wealth has greatly increased, but it is not distributed in other countries as it is in our own. Who that has visited the homes of labor in England or France, will believe that the over-crowded, half-clad, half-fed population of a manufacturing town can be compared in domestic comfort with the laboring classes of other times, when the honest housewife wrought out of the noisy wheel and loom the honest, warm, abundant homespun; when the labors of the field brought to a country, not overpopulated, abundance of food; when labor had not yet destroyed its compensation by rivalry with itself; when the infirm poor were not yet so numerous that the benevolent rich could not look after them, and supply their wants. Who will believe that the crowded, hot, dusty, ill-ventilated manufactory can contribute to health like the open field where men once labored with its fresh breeze and its sun shine. The better and middle classes have always been long-lived. *Their* home condition may have been improved in the period referred to; but have they gained as much as the many, the laborers, have lost? I confidently believe that so far from their being a betterment in the social

condition of Europe within 150 years, when a fair balance is struck, it will be found that things personal contribute less than formerly to prolong life. Still it cannot be denied, that in the general improvement of society has been done for this great object. It is in cities chiefly that these important changes are seen; and even there they are confined mostly to the rich, or at best are brought by the rich only to the doors of the poor, beyond which they rarely strive to pass. Staying as far as possible the spread of pestilence; improved ventilation in the widening of streets, and in the construction of dwellings and public buildings; diminishing the causes of disease by the removal of filth, and by a judicious drainage; and the encouragement of personal cleanliness, by making water abundant and bathing cheap; these, no one will deny, are benefits, solid benefits. But *all that is valuable in them is based on principles elaborated and promulgated by the medical profession.* Even the details of the plans by which the public have realized these benefits, have in many instances been prescribed by the profession. There is an implied recognition of this fact, in the name "medical police" which is given to the department that governs most of these things, and still more in the fact that their supervision is in a considerable degree entrusted to an "inspector" chosen from the medical profession. These, then, are medical facts popularized, as are a thousand other medical facts in hygiene and the laws of regimen. May we not, then, freely imparting as we do to the public the advantages derivable from these things; may we not ask to be remembered as the authors of the doctrines from which these benefits flow.

There is another view of this subject. We hear enumerated among the causes of *tuburcular consumption,* imperfect protection either by house or clothing, against the vicissitudes of weather; scanty and innutritious food; imperfect ventilation; vitiated air; dwelling in dark, damp places; indifference to personal cleanliness. When it is remembered that these are important points among the particulars in which it is claimed that society has so greatly improved, it will be expected that this formidable malady must gradually recede before the advancing improvements. But Sir James Clark assures us, (in his book on Consumption) that this is not the case. He has carefully studied the London bills of mortality, making annual averages for periods of ten years, to avoid the influence of epidemics and accidental agencies; and he finds that from 1700 to about 1830 there

was no diminution in the frequency and the fatality of this disease, but rather that the *proportion of deaths from it has been increasing during that whole period.* At the same time this author fully confirms the statement already quoted from the history of England, by showing that the mortality from all diseases, consumption included, has diminished nearly one half; consumption excluded, more than one half. I need hardly add, that the profession has never claimed great control over this affection; and that during all the period here referred to, it was held to be incurable. This statement favors a conviction that the advantages we have gained over disease are more in actual practice than in prevention and hygiene.

But we have facts more directly to my purpose: such as will show the physician's care of the sick, freed from all other agencies that are supposed to have influence in prolonging life; and, comparing the results of that care, at different periods, our claims will be in no respect weakened.

Dr. Merriman deduces from the bills of mortality just referred to, the fullest evidence, that in the department in which he was so much distinguished, the most signal improvement has been made. In 1680, one in forty-four died while under the care of the medical attendant; within 50 years from that time, only one in seventy died under the same circumstances; in another term of 50 years, mortality was reduced to one in eighty-two; and in 40 years more (the period ending with 1820), it had fallen as low as one in 107. Here is a condition in which knowledge and skill are left to work their way unhindered and unhelped. Hygiene has little to do with it; the improvements of society even less. It is nature and the doctor, and how has the doctor triumphed?—fifty-nine per cent. of such as must have died in the latter years of 1600, saved in the progress of above a century and a half! This is doing something to lift from the sex the heavy weight of the primal curse; and we challenge, in return for it, their kind regard.

Let us now bring our inquiry nearer home. The records of the New York Hospital, a medical charity supported from the treasury of the State, show the mortality, together with the number of patients treated annually since its foundation. The first 50 years of its existence end with 1842. If this term be divided into periods of ten years each, the progressive improvement is uninterrupted; so that while the relation of deaths to admissions in the first 15 years was one in $7\frac{7}{8}$, in

the last 5 years it is one in 11⅛. This is a gain of more than 30-100, or 31 saved alive out of every 100 that formerly would have died. Now here is little besides medical treatment. The growth of the city has not materially improved the site of this Institution. The same building is now used that was used when it was opened, though others have been added. The wards were no more crowded through their early years than they were in 1842; the comfort of the patient has been equally cared for at both periods; and it is proper to give emphasis to the statement, that in this important result, vaccination has had no part. This inestimable discovery was made, it is true, early in this period of 50 years, but it could in no way have affected this hospital, because small pox has never been admitted into it since its foundation. What then have we here but improvement in the practice of medicine and surgery? And it cannot but be noticed, first, that the result here recorded equals, even exceeds, what is claimed in society at large, from all beneficial causes operating together; second, that this result, gained without the aid of vaccination, shows that, great as is the amount of good done by this discovery, it is far from being the only life-saving agency by which the world has been blessed in the past half century.

The important deductions here made from the statistics of the N. Y. Hospital are sustained by similar facts as collected from the records of the Pennsylvania Hospital, Philadelphia. That Institution was opened for the reception of patients in 1752. Its first 90 years were completed, then, in 1842. During this period it received 39,290 patients, and lost of that number 4,120. I have not been able to obtain annual reports, but the deaths for the whole term of 90 years were one in 9½ of all admitted, while in the last of these years it was only one in 11.87. This gives us the last year better than the whole by more than 19 per cent.; an improvement we could only have been prepared for, after learning the striking facts substantiated by the fullest details from the N. Y. Hospital.

From the statistics of the last century it appears that the number of patients admitted into the Pennsylvania Hospital, in the ten years ending with April, 1852, was 13,472; of whom 1056 died, making the deaths a little better than 1 in 12¾. Thus we have a gain in the last ten years, over the preceding 90, of more than 25 per cent.

In appreciating the value of these facts, it must be borne in mind

that the physicians and surgeons to whom hospital duties are assigned, are but the representatives of their profession. They are the exponents, the public manifestation of its condition. What they do within the hospital walls, others are doing in private circles, each in his own proper sphere.

Is it not true, then, that medicine is the first of the progressive arts; and not first only, but incomparably above and beyond all others in the priceless benefits it has bestowed on man? Yet who has risen up to give it public thanks for its herculean labors? Who has proposed to commemorate the vast achievement of prolonging the years of the life of man more than one-fourth their former average, throughout civilized Europe and America, in the short period of half a century?

When a great canal or railroad is completed, the air is rent with clamors. Men's voices are inadequate to express their joy, and cannons thunder forth their glad congratulations. Orators speak of "the marriage of mighty waters;" and men, as they meet in the street, say, the great work is accomplished. Well, is it not better thus?—for what celebration can adequately commemorate these triumphs of medicine! What monument can typify their greatness? Yet we have a right to demand a fair estimate of the value of our profession to society, and an honest acknowledgment of what it has done for the well being of man. Grant us this, and, by the blessing of God, we will raise our own monument; it shall be the armies of living men our hands can rescue from the grave.

PRIZE MEDAL.

The Committee appointed to award "the Medal presented by the Montgomery County Medical Society to the Ohio State Medical Society as a prize to be awarded to the author of the best Essay on any medical topic," submit the following

INSTRUCTIONS TO COMPETITORS.

1st. The subject of the Essay shall be chosen by the writer from among the various topics of medical science, literature and practice.

2nd. Any Member of the Ohio State Medical Society may compete for the Prize.

3d. Each competitor must place his manuscript in the hands of the Chairman of this Committee, on or before the 1st of April, 1854.

4th. Each Essay must be accompanied with a sealed packet, bearing the name and address of the writer.

5th. The packets containing the names of the unsuccessful competitors, will remain unopened in the hands of the Chairman of this Committee, together with the Essays, until called for by their authors.

6th. The successful Essay shall be laid before the State Medical Society on the first day of its Annual Session in 1854; and the Medal presented its author on the afternoon of said day.

H. L. THRALL, Chirman of
Committee.

CONSTITUTION.

ARTICLE I.

SEC. 1. This association shall be called the "OHIO STATE MEDICAL SOCIETY," and shall be composed of resident and honorary members.

ARTICLE II.

SEC. 1. The Society shall constantly have in view:

First, The association of the Profession, for the purposes of mutual recognition and fellowship;

Second, The maintenance of union, harmony and good government among its members, thereby promoting the character, interests, honor and usefulness of the profession;

Third, The cultivation and advancement of medical science and literature, and the elevation of the standard of professional education.

ARTICLE III.

SEC. 1. The resident members shall be regular practitioners of medicine or surgery, in the State of Ohio, who shall be elected by vote of a majority at any regular meeting, their eligibility having been previously reported upon by the committee on admissions.

ARTICLE IV.

SEC. 1. Honorary members shall only be admitted by a vote of two thirds of the members present, at a regular meeting, having been first recommended by the committee on admissions. The whole number of honorary members shall not exceed one hundred.

ARTICLE V.

SEC. 1. A vote of two thirds of the members present shall be requisite for the expulsion of a member, which vote shall be had in consequence of a report from the committee on Ethics, and at the next regular meeting subsequent to such report.

ARTICLE VI.

SEC. 1. The officers of this Society shall be a President, four Vice Presidents, two Secretaries, a Treasurer and Librarian, all of whom shall be elected annually, by ballot, and a majority vote, at the regular meeting. They shall severally perform the duties assigned in the by-laws, as shall also the standing committees.

ARTICLE VII.

SEC. 1. The following standing committees shall be annually appointed by the President, and shall each consist of five members: 1st, an Executive Committee; 2nd, a Committee on Finance; 3d, on Publication; 4th, on Medical Ethics; 5th, on Medical Societies. A Standing Committee on Admissions, of like number, shall be elected by ballot, and a majority vote, at the same meeting, annually.

ARTICLE VIII.

SEC. 1. No part of this constitution shall be repealed, annulled, altered or amended, except at a regular meeting, subsequent to one at which a proposition to that effect may have been made, in writing, and then only by a vote of four-fifths of all the members present.

BY-LAWS.

ARTICLE I.

MEETINGS.

SEC. 1. At all meetings the presence of fifteen resident members shall be necessary to constitute a quorum.

ARTICLE II.

OFFICERS.

SEC. 1. *The President* shall be elected annually, at the regular meeting in June, by nomination, ballot and majority vote. He shall preside, enforce a due observance of the Constitution and By-Laws, see that all members of committees and officers perform their respective duties, appoint all committees not otherwise provided for, give the casting vote only, sign Diplomas and all other official documents requiring his signature, and perform such other duties as appertain to his office by usage and custom.

SEC. 2. *The Vice Presidents* shall assist the President in the performance of his duties. In his absence shall preside in order of Seniority—rank being determined by the number of votes cast for each at his election—if the number of votes shall be equal, age shall confer precedence.

SEC. 3. *The Secretaries* shall keep the minutes of the proceedings of all meetings, notify officers, &c. of their appointments, and the duties required of them; sign Diplomas, and certify to all official acts requiring the same; receive the signatures and initiation fee of newly elected members, and do such other business as shall be required, or as the Society may, from time to time, direct in their department.

SEC. 4. *The Treasurer* shall receive all moneys due to the Society,

and pay all bills endorsed by the Finance Committee and countersigned by the President, keeping correct accounts of the same, and making a full and detailed report at the annual meeting in June.

SEC. 5. *The Librarian* shall have charge of all books, manuscripts, instruments, preparations and other scientific property belonging to the Society; shall keep a catalogue of the same, in the usual manner, and report upon the condition of his department to the annual meeting in June.

ARTICLE III.

STANDING COMMITTEES.

SEC. 1. *Standing Committees* shall keep regular minutes of their proceedings, and furnish an authenticated copy to be deposited with the Librarian.

SEC. 2. It shall be the duty of the Committee on Admissions, upon receiving the names of candidates for membership, to make due enquiry, and report such as may be found worthy, to the Society, which may thereupon elect them. Should the Committee fail to report upon nominations submitted to them, any member having made such nomination, may renew the same directly to the Society, in which case a vote of four-fifths of the members present shall be requisite to constitute an election.

SEC. 3. *The Committee on Ethics* shall hear all complaints of breach of etiquette, or violation of Medical Ethics; it shall decide all questions of Ethics submitted to it. If any member shall be charged, in writing, with any violation of the provisions of the Constitution or By-Laws, or with unprofessional conduct, a copy of such charge shall be furnished to him, himself and his accuser cited to appear, when the Committee shall proceed to hear the case, reserving its decision to be reported to the Society, when its action may be affirmed by a vote of a majority of the members present.

SEC. 4. *The Committee on Finance* shall superintend the monetary affairs of the Society, inspect and audit all bills and the accounts of the Treasurer, and make such an assessment, by a pro rata tax upon the resident members, as may be necessary for incidental expenses; which, however, shall not exceed the sum of $100 per annum.

SEC. 1. *The Committee on Publication* shall superintend the printing of such papers as may be ordered to be published, so that they

may be issued upon uniform paper, &c., under the title of "Transactions."

SEC. 6. *The Executive Committee* shall digest and prepare the business of each meeting, provide suitable rooms for the purposes of the Society, recommend plans for the promotion of its objects, and in all things protect and superintend the general interests of the Society.

SEC. 7. *The Committee on Medical Societies* shall consider and report on the organization of such Medical Associations as desire to become auxiliary to the State Medical Society, and generally take charge of this department; making, at each annual meeting, as complete report as may be practicable.

ARTICLE IV.

SEC. 1. Any resident member vacating his membership, shall thereby be divested of any right or title to any portion of the funds, or other property of the Society.

SEC. 2. Every member, on admission, shall pay the sum of $3,00 as an initiation fee, and sign the Constitution and By-Laws; nor shall he be entitled to the rights of membership until the same is done.

SEC. 3. All vacancies in office shall be filled *ad interim* by the President.

SEC. 4. These By-Laws may be suspended by a three-fourths vote at any regular meeting, and they may be repealed or amended by a similar vote, notice of the same having been given in writing, at a previous meeting.

SEC. 5. Rules of order, and all questions arising upon the same, shall be determined by parliamentary usage.

PLAN

FOR THE FORMATION OF AUXILIARY SOCIETIES.

Associations desirous of becoming auxiliary, must furnish to the Committee on Medical Societies a copy of their Constitution and By-Laws, and a list of the names of their members.

The Committee will report thereon, a majority vote of the Society, admitting as members the President and Secretary, ex-officio, together with one delegate for every ten members the auxiliary Society may consist of.

Delegates will present to the State Medical Society, such papers, &c., &c., as the Association they represent may select, copies of which they will deposit with the Committee on Publication.

In questions of a general nature affecting the profession of the State, should the yeas and nays be demanded, the delegates, on producing the individual authority of each, may vote by proxy for absent members of the State Medical Society, who are also members of the same Association with the delegate.

Auxiliary Societies will, so far as possible, contribute to the furtherance of the objects of the State Medical Society, by selecting from their own archives such original papers, essays, reports, and especial statistics, as they may deem of sufficient value, on every subject connected with medical science.

AUXILIARY SOCIETIES,

WITH DATE OF ADMISSION.

1849.	Hamilton County Medical Society, - -	Auxiliary No.	1
1849.	Warren Co. Medical Society of Lebanon,	" "	2
1849.	Clark County Medical Society, - - -	" "	3
1849.	Lancaster Medical Institute, - - - -	" "	4
1849.	Preble County Medical Society, - - -	" "	5
1850.	Meigs County Medical Association, - -	" "	6
1850.	Wayne County Medical Association, -	" "	7
1650.	Richland County Med. and Surg. Soc. -	" "	8
1850.	Medical Association of Adams, Brown and Clermont, - - - - - - -	" "	9
1850.	Stark County Medical Society, - - -	" "	10
1850.	Erie County Medical Society, - - -	" "	11
1851.	Miami Co. Medico Chirurg. Society, -	" "	12
1851.	Tuscarawas County Medical Society, -	" "	13
1851.	Belmont County Medical Society, - -	" "	14
1851.	Montgomery Co. Medical Society, - -	" "	15
1853.	Champaign Co. Medical Society, - -	" "	16

HONORARY MEMBERS.

Prof. H. H. Childs, - - -	Pittsfield, Mass.
Prof. Chas. A. Lee,	
Prof. Wm. Sully, - - -	New Haven, Conn.
Prof. J. Knight, - - - -	New Haven, Conn.
Dr. C. B. Guthrie, - - -	New York City.
Dr. M. J. Bailey, - - - -	New York City.
Prof. Willard Parker, - - -	New York.

MEMBERS.

Ackley, H. A.	Cleveland.
Agard, A. H.	Western Star.
Albers, Wm.	Lancaster.
Allen, C. P.	Elyria.
Allen, Peter	Kinsman.
Ames, C. E.	Cleveland.
Angel, E.	Akron.
Armor, Saml. G.	Cleveland.
Ashmun, G. P.	Hudson.
Atwood, N.	Russelville.
Awl, Wm. M.	Columbus.
Baker, A. H.	Cincinnati.
Baker, T. H	Millbrook.
Ball, A.	Irvillo
Beach, C. H.	Wellington.
Beaugrand, Pierre	Fremont.
Belding, Alvin	Ravenna.
Bell, Wm.	Xenia.
Bennett, A. J.	Bolivar.
Bigelow, A. D.	Cleveland.
Bigelow, J. M.	Lancaster.
Bing, J. P.	Ironton.
*Boalse, A. N.	Lockbourne.
Bœrstler, G. W.	Lancaster.
Bonner, Stephen	Cincinnati.
Boyle, C. E.	Columbus.
Bricker, W. R.	Shelby.
Briggs, Jas. M.	Caledonia.
Brinkerhoof, D. H.	Tippecanoe.
Brodbeck, C.	Dayton.
Bronson, Jas.	Newton Falls.
Brooks, Frank,	Hope.
Brown, E. T.	Logan.
Brown, J. M.	Cincinnati.
Brown, M.	Circleville.
Bryan, E. F.	Granville.
Buckner P. J.	Cincinnati.
Buckner, Wm.	Hamilton.
Burr, I. N.	Mt. Vernon.
*Butterfield, Jno.	Columbus.
Cameron, D. D.	Cleveland.
Dawson, J. W.	Cincincati.
Card, G. W.	Painesville.
Carey, Abel	Salem.
Carey, H. G.	Dayton.
Carney, E.	Berkshire.
Carter, Francis	Columbus.
Cassels, J. Lang	Cleveland.
Catley, R. P.	Poseyville, Ind.
*Chamberlin, E. K.	Cincinnati.
Chandler, S. R.	Duncan's Falls.
Chapman, W. B.	Cincinnati.
Clarke, W. T.	Central College.
Clements, Joshua	Dayton.
Cleveland, T. G.	Cleveland.
Cochran, M. B.	Delaware.
Cole, Joseph	Akron.
Collins, E. T.	South Charleston.
Collins, L.	Ravenna,
Comegys, C. G.	Cincinnati.
Conklin, H. S.	Sidney.
Conlan, Jno. I.	Cleveland.
Conner, P. S.	Cincinnati.
Converse, J. N.	Union City, Ind.
Ccoke, F.	Atwater.
Coons, Israel A.	Dayton.
Cotton, J. D.	Marietta.
Coulter, J. P.	Wooster.
Cox, D. A.	New Paris.
Crabbs, Jacob	Olivesburg.
Craighead, J. B.	Dayton.
Crook, James M.	Dayton,
Crook, Oliver	Dayton.
Crume, P. M.	Eaton.
*Dana, M.	Risden.
Davis, E. H.	New York.
Davis, John	Dayton.
Davis, O. E.	Lancaster.
Davis, S. B.	Lockbourne.
Davis, W. H.	Bllepoint.
Dawson, John	Columbus.
Dawson, J. R.	Bellbrook.

Delamater, J. J.	Cleveland.
Delamater, John	Cleveland.
Denig, Chas. E.	Columbus.
Denig, Robt. M.	Columbus.
Dille, A. L.	Mayfield.
Dolman, Wm.	Cleveland.
Dorsey, G. Volney	Piqua.
Edwards, O. F.	Loudonville.
Edwards, Tom O.	Cincinnati.
Eels, G. E.	Lithopolis.
Effinger, M.	Lancaster.
Estep, William	Lloydsville.
Fassett, Harry	Johnstown.
Ferguson, Benj. P.	Kirkinsville.
Field, E.	Frankfort.
Firestone, Leander	Congress.
Firor, S. V,	Tarlton.
Fischer, William	Lancaster.
Fisher, Alexander	Akron.
Fisher, D. A.	Baltimore.
Fisher, Elias	Lebanon.
Fisher, Sylvanus	Waynesville.
Foster, Henry C.	Enon.
Foulke, L. W.	Chillicothe.
Fuller, S. W.	West Liberty.
Fyffe, E. P.	Urbana.
Gailey, J. D.	Marion.
*Gard, B. F.	Columbus.
Gard, I. N.	Greenville.
Garlick, Theo.	Youngstown.
Garst, M.	Dayton.
Gaston, E.	Morristown.
Gay, N.	Columbus.
Gilbert, I. K.	Tippecanoe.
Gille, L. C. C.	Westville.
Gillet, Berkley	Springfield.
Goble, P.	Worthington.
Goddard, J. W.	Urbana.
Gordon, P. A.	Cleveland.
Gordon, Thos. W.	Bazetta.
Green, D. K.	Jamestown.
Green, J. N,	Bainbridge.
Green, J. W.	Fairfield.
Griswold, L. D.	Elyria.
Haldeman, L.	Minerva.
Hamilton, J. W.	Columbus.
Hamilton, L. A.	Chardon.
Hamilton, Robt.	Morristown.
Hammond, Jacob	
Harley, L. G.	Dalton.
Helmick, G. W.	Harrisburg.
Helmick, J.	Harrisburg.
Helmick, L.	Harrisburg.
Hempstead, G. S. B	Portsmouth.
Hendershott, I.	Springfield.
Henderson, Jas. P.	Newville.
Hendren, W.	Delaware.
Hewitt, M. L.	Cleveland.
Hiberd, J. F.	San Francisco.
Hildreth, Chas. C.	Zanesville.
Hills, R.	Delaware.
Hoagland, C. N.	Tippecanoe.
Holston, J. G. F.	Zanesville.
Hopkins, Rudd C.	Cleveland.
Hopple, Jas.	Cincinnati.
Hornbeck, R.	New Carlisle.
House, G. W.	Harrisburg.
Houston, M. L.	South Charleston.
Houston, Robt.	South Charleston.
Howard, E. W.	Akron.
Howard, H. C.	Columbus.
Howard, R. L.	Columbus.
Hubbard, N. W.	Newark.
Huber, W.	Hamilton.
Hudson, W. N.	Denmark, Iowa.
Huestes, Isaac	Chester Hill.
Hunt, S. P.	Morrow.
Hurxthall, F. S.	Massillon.
Ingram, John	Savanah.
Johnson, William	Delaware.
Johnston, Thos. B.	Xenia.
Jones, T. W.	So. Bloomfield.
Jones, W. W.	Toledo.
Judkins, J. P.	Cincinnati.
Judkins, William	Cincinnati.
Kable, W. R.	
Kaufman, C. S.	Cincinnati.
Kay, Isaac	Springfield.
Keever, M. H.	Ridgeville.
Kelley, Edwin	Elyria.
Kirtland, J. P.	Cleveland.
Knowlton, Jno. A.	Franklin.
Koogler, Adam	Greenville.
Kreider, M. Z.	Lancaster.
Kuhn, Henry	Tiffin City.
Lamme, W. H.	Centreville.
Landon, C. P.	Westerville.
Landon, G. W. H.	Westerville.
Lane, E. S.	Sandusky.
Langworthy, O. P.	Reynoldsburg.
Lathrop, H.	Columbus.
Lawson, L. M.	Cincinnati.
Lewis. D.	New Haven
Lyman, C. N.	Wadsworth.
Mack, H. O.	Shelby.
Mack, John	Shelby.

Maris, G. W.	Columbus.
Marsh, N. B.	Cincinnati.
Martin, Joshua	Xenia.
Martin, Samuel	Xenia.
Matchett, J. E.	Castine.
McAroy, W. B.	Franklin.
McCullough, T. P.	Indianapolis.
McDonald, A. R.	Kingston.
McFarland, J. A.	Tiffin City.
McGuire, W. B.	Waynesville.
McHenry, W.	Lima.
McIlhenny, J. J.	Fairfield.
McKenzie, N. K.	
McLaughlin, A. C.	Tremont.
McLean, R. G.	Lockbourne.
McNally, Thos.	Chillicothe.
McNeal, F. D.	Canal Dover.
Merriman, And.	Madison.
Metz Abraham	Rome.
Metzger, Geo. S.	Columbus.
Millikin, Saml.	Hamilton.
Miner, E. L.	Lithopolis.
Mitchell, G. F.	Mansfield
Moore, W. C.	Congress.
Moore, Jonas	Marietta.
Morrison, J.	Columbus.
Mosgrove, Adam	Urbana.
Mosgrove, Jas. M.	Urbana.
Mount, Wm.	Cumminsville.
Mussey, R. D.	Cincinnati.
Neff, B.	Piqua.
Newberry, J. S.	Cleveland.
Newton, W. S.	Harmar.
Nicholson, W. A.	Cleveland.
*Norton, J. C.	Marion.
Owen, T. C.	Mechanicsburg.
Paoli, Gerhard	Springfield.
Peck, W. L.	Circleville.
Pence, P.	
Poage, J. G.	Enon.
Potter, J. P.	Canal Winchester.
Price, Joseph	Randolph.
Purple, Jno. G.	Brooklyn.
Quinn, J. J.	Cincinnati.
Ramsey, W. H.	Mt. Vernon.
Reeves, W. H.	Deavertown.
Reisinger, J. S.	Gallion
Rickey, W. W.	Cleveland.
Rigdon, L.	Hamilton.
Rives, Landon C.	Cincinnati.
Rives, Landon	Cincinnati.
Robertson, Chas.	McConnelsville.
Robertson, Jas.	Perrysburg.
Roby, Geo. W.	Bainbridge.
Rodgers, Robt.	Springfield.
Rodman, Thos. S.	Cleveland.
Rogers, J. G.	New Richmond.
Russell, J. W.	Mt. Vernon.
Rukenbrod, S. F.	
Sachse, Geo. J.	Lancaster.
Sampson, G. W.	McCutcheonville.
Sanders, Moses C.	Norwalk.
Sanger, W. W.	Cincinnati.
Sayles, J. A.	Ohio City.
Schenck, W. L.	Franklin.
Schroeder Danl.	Ganges.
Scobey, W. H.	Rossville.
Selden, O. G.	Shanesville.
Seys, Henry H.	Springfield.
Shackelford, R. J.	Medway.
Sharp, W. T.	West Liberty.
Sheldon, B.	Ohio City.
*Shotwell, Jno. T.	Cincinnati.
Silver, D. H.	Milford Centre.
Sisler, William	Manchester
Skinner, J. S.	Columbus.
Slocumb, A. M.	Cincinnati.
Smith, A. C.	Medina C. H.
Smith, C.	Donnelsville.
*Smith, Edmund	Dayton.
Smith, Jas.	New Lexington.
Smith Jno. A.	Piqua.
Smith, L. J.	Hamilton.
Smith, S. H.	Cincinnati.
Smith, S. M.	Columbus.
Smith, Vespasian	New Carlisle.
Smith, William	Ganges.
Snodgrass, S. B.	Dalton.
St. John, Saml.	Cleveland.
Stanton, Benj.	Salem.
Steele, Henry K.	Dayton.
Sterling, E.	Cleveland.
Sterling, Theodore	Ohio City.
Stevens, E, B.	Lebanon.
Steward, Solomon	Mansfield.
Stockstill, Jno. N.	New Carlisle.
Storey, R.	Cleveland.
Strong, Nathl.	Centreville.
Tappan, Benj. Jr.	Steubenville.
Taylor, Julius S.	Carrolton, Mont.co
Thompson, J. B.	Columbus.
Thompson, J. C.	So. Bloomfield.
Thompson, Mat.	Mt. Vernon.
Thompson, Robt.	Columbus.
Thrall, H. L.	Columbus.
Tilden, Danl. Jr.	Cincinnati.

Tipton, R. H.	Darbyville.
Townsend, N. S.	Elyria.
Tr-on, John	Miamisburg.
Trevitt, Wm.	Columbus.
Tullis, J. Watson	Troy.
Underwood, W.	New Baltimore.
Updegraff, J. T.	Mt. Pleasant.
Van Pearse, Jas.	Columbus.
Van Tuyl, D. B.	South Bend, Ind.
Van Tuyl, H.	Dayton.
Vattier, Jno. L.	Cincinnati.
Warder, Jno. A.	Cincinnati.
Weaver, Joseph	Miamisburg.
White, John	
Willey, Samuel	Columbus.
Williams, A. S.	Rome.
Wilson, David	Licking Co.
Wilson, J. F.	New Holland.
Wilson Jno. N.	Newark
Wood, Thomas	Cincinnati.
Woods, D. B.	Warren.
Woodward, Chas.	Cincinnati.
Wright, Chas. W.	Cincinnati.
Wright, M. B.	Cincinnati.
Wright, M. L.	Cleveland.

*Deceased.

☞ Persons desiring to transact business with the Treasurer, will address P. M. CRUME, M. D. Eaton, O.

TRANSACTIONS

OF THE

OHIO STATE MEDICAL SOCIETY,

HELD

IN THE CITY OF CINCINNATI,

JUNE 8TH, 1854.

CINCINNATI:
HARDY, WHITE & COMPANY'S STEAM PRINTING HOUSE.
100 Walnut, bet. Front and Water streets.
1854.

TRANSACTIONS

OF THE

NINTH ANNUAL MEETING

OF THE

OHIO STATE MEDICAL SOCIETY,

HELD

IN THE CITY OF CINCINNATI.

JUNE 6th 1854.

CINCINNATI:
"WEST AMERICAN MONTHLY"—PRINT
No. 98 Walnut Street.
1854.

TRANSACTIONS

OF THE

NINTH ANNUAL SESSION

OF THE

Ohio State Medical Society,

HELD

IN THE CITY OF CINCINNATI,

JUNE 6th 1854.

Cincinnati, Tuesday June 6th, 1854.

The Ohio State Medical Society met according to ajournment in this city at 9 o'clock A. M. in the *Ninth Street Methodist Church.*

President Taylor upon taking the Chair called the house to order.

The Committee on Admissions was called for, all the members of which were absent, except Dr. Samuel Millikin.

The Chair appointed the following gentlemen in place of the absent —James Crook, M. B. Wright, R. G. McLean, John Dawson.

Dr. G. W. Boerstler moved that the Chair appoint a Committee to report permanent officers for the ensuing year.

G. W. Boerstler, H. G. Carey, J. B. Thompson, J. C. Thomson, L. S. Dodge—Committee.

The Committee on Medical Societies reported that The Clermont Medical Association, and The Seneca Medical Society, having complied with the requisition of this Society, are entitled to admission as auxilliaries Nos. 19 and 20.

On motion of Dr. Woodward, George Cole, of Cincinnati Gazette, and Jas. F. Day, of Cincinnati Commercial, were admitted as reporters for their respective papers.

Dr. Hills offered the following resolution :

Resolved, That there be appointed from this body a reporter of the proceedings of the Society, with the view of having embodied the substance of the various discussions upon subjects of interest, and to aid the Secretaries in making a full record.

Pending which the Committee on admissions reported the following persons for membership, who were on motion elected :

R. W. Gabriel, Dublin.
R. L. Rea, Oxford.
B. F. Hart, Harmar.
Alex. Dunlap, Ripley.
C. F. Thomas, Pomeroy.
H. Austin, Mansfield.
W. Clendenin, Cincinnati.
J. F. Potter, Cincinnati.
Salman Hudson, Whittlesey.
Albert Wilson, Sidney.
J. T. Webb, Cincinnati.
F. Rolker, Cincinnati,
John R. Hyde, Deerfield.
W. T. Taliaferro, Cincinnati.
W. L. McMillen, Columbus.
R. J. Patterson, Columbus.
A. F. Teal, Carroll.
L. D. Sheets, Dayton.
R. R. McIlvaine, Cincinnati.
D. Judkins, Cincinnati.
Geo. Mendenhall, Cincinnati.
H. H. Darst. Tippecanoe.
R. R. McMeens, Sandusky.
H. J. Dunaho, Sandusky.
D. A. Lathrop, Bellview,
J. P. Walker, Cincinnati.
A. T. Kyte, Walnut Hills.
Wm. Dorrington, Cincinnati.
G. A. Gotwald, Cincinnati.

The Committee on permanent officers reported :

For President :

R. HILLS, of Delaware.

For Vice Presidents :

1ts. JONAS MOORE, of Marietta,
2nd. R. G. MCLEAN, of Lockport,
3d. I. A. COONS, of Dayton,
4th. E. STERLING, of Cleveland.

Secretaries :

LANDON RIVES, of Cincinnati,
P. S. CONNER, of Cincinnati,

Treasurer :

STEPHEN BONNER, of Cincinnati.

Committee on Admissions :

C. WOODWARD, of Cincinnati,
JAS. CROOK, of Dayton,
J. W. HAMILTON, of Columbus.
J. D. COTTON, of Marietta,
T. W. GORDON, of Georgetown.

Dr. Hills asked permission of the Committee to withdraw his name as a candidate for the presidency.

An election was then held by ballot which resulted in the selection of

PRESIDENT:

CHARLES WOODWARD,

VICE PRESIDENTS:

1st. JONAS MOORE,
2nd. R. G. McLEAN,
3d. J. A. COONS,
4th. E. STERLING.

SECRETARIES:

LANDON RIVES,
P. S. CONNER.

TREASURER:

STEPHEN BONNER.

COMMITTEE ON ADMISSIONS:

JAS. CROOK,
J. W. HAMILTON,
J. D. COTTON,
T. W. GORDON,
DAVID JUDKINS.

On motion, Drs. D. Judkins and J. S. Newberry were appointed a Committee to wait upon the President elect, and conduct him to the chair.

Dr. Taylor, upon retiring, introduced Dr. Woodward to the house, who upon taking the chair, expressed in a brief and appropiate manner his gratitude to the Society for the honor conferred in elevating him to so responsible a position.

The Secretaries elect being absent, Dr. W. W. Dawson was, on motion of Dr. I. S. Dodge, appointed *Secretary pro tem.*

Dr. D. Judkins moved that Dr. J. T. Webb be appointed assistant *Secretary pro tem.*

Dr. Hills moved that the resolution offered by him, and postponed for other business, be taken up this afternoon.

A communication was received from Dr. J. P. Walker, Sect'y. of the MEDICAL SOCIETY OF CINCINNATI, inviting the members of this Society to this Hall at 7½ o'clock this evening to hear an "Obituary address

upon the life and character of the late Dr. P. J. Buckner," by S. H. Smith, M. D.

On motion of Dr. Crume, the Society adjourned till half past 2 o'clock this afternoon.

TUESDAY, June 6th.
AFTERNOON SESSION—2½ o'clock, P. M.

President Charles Woodward in the Chair.

Reports of Standing Committees being called for.

Dr. John Dawson offered as Chairman of the Committee on Medical ethics a brief report upon that subject.—(See Appendix C.)

After the reading of this report, it was discussed by Drs. M. B. Wright and Holston, and on motion of the latter gentlemen refered to the Committe on Publication.

Dr. H. K. Steele reported, as Chairman of the Committee on Publication in reference to the publication and distributing of the Transactions of the Society, the distribution of Diplomas, the recommendation to legistature of the passage of Dr. J. L. Vattier's bill to provide for a "Bureau of Statistics in the Secretary of State's office," and that the Committee had, according to their instructions, conveyed by letter to the widows of the seven physicians, destroyed in May 1853 by the New York and New Haven railroad calamity, the sympathies and condolence of this body in their sad bereavement. (See Appendix B.)

The Committee on Medical Literature asked through Dr. Armor, Chairman, leave to regort at some subsequent meeting during this session. Reqest granted.

Dr. L. M. Lawson, Chairman of the Committee on Practice, requested, that in consequence of the great difficulty of collecting facts in regard to this subject, that further time be allowed.

Dr. John Dawson moved that the Committee be continued for another year.

The resolutions on page 9, last year's Transactions, reported by Select Committee, composed of Drs. Dorsey, Landon Rives and J. G. Rogers, to whom was refered the resolution of Dr. Dorsey with the addendum of Dr. Rives and the amendment of Dr. Rogers were on motion taken up. The resolutions read thus:

Resolved 1st, That the officers of the several County or District Societies, auxilliary to the State Medical Society, be requested each year to report to the Secretary of said Society the names of all their members, to serve as a basis for the Medical statistics of the State, and that the several Medical Colleges of the State furnish the Secretary with a list of their graduates annually, and that persons applying for membership in this Association shall be admitted *only* on a certificate of membership in a local Society, where such exists, embracing his county.

Resolved 2nd, That the Ohio State Medical Society do deny the privileges or benefits of said Society to such persons as attend incorporated institutions or attend the poor (where provision is made by proper authorities for furnishing them with Medical attention) for a pecuniary consideration less than the established rate of charges in the district, county, city or town where such person may reside.

After some considerable discussion in which Drs. Crume, Judkins, Holston, and McLean participated, the resolutions were, on motion of Dr. McLean, made the order of the day for to-morrow at 2 o'clock P. M.

The Commmittee on Admission reported the names of the following gentlemen for membership, all of whom were elected:

W. H. Mussey,	Cincinnati.	C. Falkner,	Hamilton.
S. C. Gholson,	"	J. C. Kenedy,	Batavia,
H. E. Foote,	"	J. Q. Oliver,	Cumminsville.
J. F. White,	"	L. A. Hendricks,	Milford.

Dr. R. G. Mc'Lean offered the following resolution:

Resolved, That members having papers to read before this Society be requested, to place them on file by title with the Secretaries.

Dr. L. M. Lawson gave notice that he would read a paper during the present session of this body, embracing some PRACTICAL REMARKS ON THE DIAGNOSIS OF PHTHISIS PULMONALIS.

Dr. Geo. Mendenhall informed the Society that he would read a short essay on NITRIC ACID AS AN ANTI-PERIODIC.

The Committee appointed at the last meeting, to request the State Legislature to pursue the Geological Survey of the State, which had unfortunately been suspended; reported through Dr. W. W. Dawson, that a bill was introduced at the last session providing for a very comprehensive survey, including the Geological structure of the State, its Palaeontology, Botany, Zoology, &c., and that said bill could with but ittle trouble be carried through at the next meeting of the General Assembly of Ohio.

Dr. Crume moved that the same Committee be continued, and requested to continue their services in securing the passage of that measure.

Dr. J. S. Newberry, Chairman of the Committee on the "Botany of Ohio," made some interesting remarks upon the variety and distribution of plants in, and the Geological structure of our State, and informed the meeting that he had prepared a report in accordance with the instructions of the Society at its last meeting.

Dr. D. Judkins moved that the report of Dr. Newberry be referred to the Committee on publication.—(See Appendix D.)

On motion of Dr. Hills, the Secretaries were requested to inform the late President of this Society, Dr. Julius S. Taylor, that his Valedictory has been made the order of the day for Thursday, at 10 o'clock A. M.—(See Appendix A.)

Dr. Mc'Ilvaine moved the following which was adopted:

Resolved, That the Secretaries be instructed to cause an advertisement to be placed in three of the city papers, inviting the citizens to attend the meetings of the Society.

Dr. John Dawson who was, by resolution at the meeting held in Dayton, made Chairman of a Committee, appointed to report upon the "Epidemics of the State of Ohio," reported that he had made some progress in collecting information upon this subject, but suggested the propriety of furnishing such materials and facts as he was in possession of to Dr. Geo. Mendenhall, who is Chairman of the Committee on the "Epidemics of Ohio, Indiana, and Michigan," of the National Medical Association. This suggestion was opposed by Drs. M. B. Wright and Mc'Ilvaine; these gentlemen contending that the subject legitimately belonged to this Society, and that to it the report should be made.

On motion the Committee was continued with instructions to report when this body shall next convene.

Dr. M. B. Wright moved the following resolution:

Resolved, That all persons having essays on the subject of Epidemics be respectfully requested to present them to this Society in such manner as they may deem proper.

A communication was received from Dr. Geo. Mendenhall extending the courtesies of the Faculty of the Miami Medical College, to the members of this Association and inviting them to visit the museum of the College.

A circular was read from Dr. Geo. Mendenhall, Chairman of the Committee of the American Medical Association on the "Epidemic Diseases of Ohio, Indiana, and Michigan," earnestly requesting the co-operation of the profession in these States, and inviting the members of this Society to contribute such facts in regard to prevalent diseases; statistics of the number of cases; mortality, &c., as may be in their possession. Maps illustrating the Geological formation of counties or districts are also desired by the Committee.

Dr. Crume, as Treasurer, submitted a report upon the finances of the Society, which, on motion of Dr. Hills, was referred to the Committee on Finance.

Dr. R. G. Mc'Lean moved that a Committee of three be appointed to investigate the report of the Treasurer for 1852, Dr. W. W. Rickey. After some remarks by Dr. McLean, the Chair appointed as this Committee: R. G. Mc'Lean, John Dawson, M. B. Wright.

The Committee on Admissions reported for membership

Nathaniel Foster,	Cincinnati.	J. C. Mc'Ginnie,	Fayetteville.
J. H. Taite,	"	Isaac C. Williams,	Bloomington.
Thos. Carroll,	"	C. B. Chapman,	Cincinnati.

who were elected.

The "Drake Medical Society," of Columbus, and the "Delaware Medical Society" were reported by the Committee on Medical Societies, as having complied with the legitimate requisitions, and were entitled to be received as Auxilliaries No. 21 and No. 22, and on motion these Societies were admitted.

Dr. Hills, by motion, brought the resolution offered by himself this morning before the meeting, and after being freely discussed by Drs. Hills, McIlvaine, John Dawson, and J. B. Thompson, it was lost.

The Committee appointed at the last meeting to "Award the medal presented by the Montgomery County Medical Society to the Ohio State Medical Society, as a prize to be awarded to the author of the best essay on any Medical topic," reported through its Chairman, Dr. R. Thompson, that the Committee had awarded the prize to the author of an essay, the title of which is, "Difficult Labors and their Treatment," and that upon opening the sealed package accompanying the paper, it was found that Dr. M. B. Wright, *of Cincinnati was the author.*

Dr. Woodward, as President, in presenting the medal to the successful author, accompanied it with a few chaste remarks of congratulation.

Dr. Wright upon receiving the award of the Committee, indulged in a brief, modest, and feeling response.

On motion, Dr. Wright was requested to read his "Prize Essay" to-morrow, at 10 o'clock A. M., and that its discussion be made the order of the day immediately after its reading.

The Chair appointed R. G. McLean, John B. Thomson, R. R. McIlvaine, Thos. Carroll, R. Hills—*The Standing Committee on Finance.*

On motion the Society adjourned to meet at 9 o'clock to-morrow morning.

CHARLES WOODWARD, PRESIDENT.

W. W. DAWSON, } *Sect. pro tem.*
J. T. WEBB, }

WEDNESDAY, 9 o'clock, A. M., June 7th.

President in the Chair.

Transactions of yesterday read and approved.

Dr. McLean moved, that in consequence of the absence of one of the Secretaries elect, from the city, and the indisposition of the other, that the Secretaries *pro tem.*, Drs. W. W. Dawson and J. T. Webb, be elected Secretaries for the ensuing year.

Dr. McLean from the Committee on Finance offered the following report, which was on motion adopted :

The Committee on Finance, to whom was referred the report of Dr. Pliny M. Crume, late Treasurer of this Society, have examined the books, vouchers and papers, pertaining the said report, and find the same correct, and recommended its adoption. The Committee would also recommend the adoption of the following resolutions :

Resolved, That the 3rd Section of the 2nd Article of the By-Laws of this Society be so changed as to require the Treasurer to receive the initiation fee of members.

Resolved, That the Treasurer is hereby authorized to procure a new Record Book for the Society, and procure the transcribing of the names and transactions to the same.

R. G. McLean,
R. R. McIlvaine,
Thomas Carroll,
J. B. Thompson. } Com. on Finance.

The report of the Committtee was received and adopted. That part of it in reference to a change in the By-Laws, having to lay on the table, to be acted upon at the next session of the Society.

Dr. R. Thompson gave notice that he would read a brief paper on a "GOUGE-MOUTH BONE-CUTTING FORCEPS," invented by himself in 1848, and used by him since that time.

Dr. Comegys informed the Society that he would, during the present session read an essay on the "ETIOLOGY AND CURABILITY OF PHTHISIS PULMONALIS."

Dr. Gordon moved that when this Society shall adjourn, that it do so, to meet in Columbus.

Dr. Holston moved to amend by inserting Zanesville instead of Columbus. Amendment carried, and the motion so amended passed.

Dr. Gordon moved the following resolution:

Resolved, That each member of this Society consider it obligatory upon himself to bring with him, and present to this Society at its next meeting as many Geological Specimens from his locality as he may be able to, and also an Herbarium of the various plants in his immediate vicinity.

Dr. Armor gave notice that he would read a paper on the "PATHOLOGY, SYMPTOMOLOGY, &C., OF LATENT PNEUMONIA."

Ten o'clock A. M. having arrived, Dr. M. B. Wright's essay was called for, after its reading and remarks upon it by several gentlemen, Dr. Crume moved that it be referred to the Committee on Publication. —(See Appendix E.)

The Committee on Admissions reported Dr. D. E. Wade, of Cincinnati, for membership who was elected, and also the name of Dr. H. Cox, of Cincinnati, was reported, with the privilege of an explanation by that gentleman in regard to his position in relation to the Regular Profession.

After some remarks by Dr. Cox, Dr. L. M. Lawson moved that a Committee consisting of John Dawson, David Judkins, M. B. Wright, J. H. Tate, and J. G. Rogers be appointed to investigate the case of Dr. Cox and report to the Society as early as possible.

Dr. J. B. Thompson moved that Drs. J. W. Hamilton, and R. Hills be added to that Committee, After some remarks by Drs. J. B. Thompson and J. J. Quinn, the motion was carried.

The Committee on Finance offered a report by resolution which was adopted, viz.:

Resolved, That an assessment of *one dollar* be levied upon each member for the current year.

R. G. McLean.
J. B. Thompson.
R. R. McIlvaine. } Committee on Finance.
R. Hills.
Thos. Carroll.

On motion the Society took a recess until 2 o'clock P. M.

WEDNESDAY, June 7th.
AFTERNOON SESSION.—2 o'clock P. M.

President in the Chair.

Transactions of morning session read and approved.

Dr. M. B. Wright moved that in consequence of the absence of Dr. S. Bonner, Treasurer elect, that Dr. Crume, the late Treasurer of this Society be elected Treasurer of this Society for the ensuing year.

The resolutions made the order of the day for 2 o'clock were now brought before the house.

On motion of Dr. Dorsey, the first resolution was taken up, and after some remarks upon the importance of having some plan adopted by which to collect the statistics of the profession of the State, and to serve as a basis upon which the Society could in future act, which were participated in by Drs. Dorsey, M. B. Wright, Crume and John Dawson; Dr. Dorsey moved that the consideration of the subject be suspended for the present to allow the Committee appointed to investigate the application of Dr. Cox for membership to report. The following was then offered:

The Committee to whom was referred, the case of Dr. Cox, propounded to that gentleman the following questions:

Do you consider yourself a member of the Regular Professsion and will you in future be governed by its rules and regulations?

Answer. Yes.

Are you at this time engaged in the preparation or sale of *Nostrums?*

Answer. No.

In your practice do you employ the remedies usually regarded valuable by the Regular Profession?

Answer. My guide is the acknowledged text books of the Regular Profession.

The Committee to whom was referred the foregoing case by leave to submit as their report the following resolution.

Resolved, That Dr. H. Cox be admitted a member of the Ohio State Medical Society.

John Dawson.
D. Judkins.
M. B. Wright.
J. H. Tate.
J. G. Rogers.

The report was received, and on motion of Dr. J. T. Webb, it was laid on the table for the present.

On motion of Dr. Mount, Dr. J. H. Brower, of Lawrenceburg, Ind., was admitted as a delegate from the STATE MEDICAL SOCIETY OF INDIANA.

On motion of Dr. Connor, Dr. Mount was requested to introduce the delegate to the Society.

Dr. Woodward, as President, received Dr. Brower and extended the courtesies of the Society to him, cordially inviting him to participate freely in all our exercises.

Dr. Brower responded in a appropiate manner, regarding the reception of himself as a delegate as a high honor to the Society which he represented, receiving it as an earnest of the good feeling which he trusted may ever exist between the profession and the State Medical Societies of Ohio and Indiana, and hoped that they may hereafter more efficiently co-operate in the advancement of Medical Science. Dr. Brower also spoke in laudatory terms of the importance of establishing a "Bureau of Statistics," such as was proposed by our townsman, Dr. Vattier, to the Legislature of Ohio.

Dr. A. H. Baker, on behalf of the Medical Profession of Cincinnati, invited the Society to an entertainment to be given at 9½ o'clock this evening at the Walnut Street House.

On motion of Dr. L. M Lawson, the business of the Society was now suspended for the purpose of hearing the several papers read, of which notice has heen given.

Previous to the reading of essays, the Committee on Admissions reported the following gentlemen for membership, all of whom were elected:

W. P. Kineaid, Neville.
B. B. Seward, West Liberty.
C. S. Muscroft, Cincinnati,
D. S. Lyman, Batavia.
M. T. Carey, Cincinnati.
John M. Kellog, "
J. J. Adams, "
E. Lynch, Greenville.
T. M. Brown, Batavia.
N. T. Marshall, Cincinnati.
S. N. James, East Liberty,
W. J. Sullivan, West Middlebury.
J. N. White, Cincinnati.
J. H. Brooks, Bourneville, O.

J. H. Brower,
M, H. Harding,
Geo. Sutton,
} Hon'y members from Indiana.

Dr. L. M. Lawson now read his paper on "PHTHISIS PULMONALIS." (See Appendix F.)

On motion the essay was referred to the Committee on Publication.

The Committee on Admissions reported the following gentlemen for membership, all of whom were elected:

John Davis, Cincinnati.
A. Jones, Wilmington,
Lewis M. Reese, Reading.
F. A. J. Gerwe, Cincinnati,
B. F. Richardson, "
B. S. Lawson, Cincinnati.
Wm. Wood, "
Sam'l Wilson, Wooster.
John J. Arrons, Cincinnati,
R. H. Johnson, "

H. B. Musgrave, Cincinnati,

Dr. G. V. Dorsey, Chairmain of the Committee on Surgery, read an interesting report on the condition and progress of that department. (See Appendix G.)

On motion of Dr. D. Judkins the report of Dr. Dorsey was referred to the Committee on Publication.

Dr. G. Mendenhall read a paper, notice of which had been given yesterday, upon "NITRIC ACID AS A ANTI-PERIODIC." (See Appendix H.)

On motion of Dr. J. N. Green it was referred to the Committee on Publication.

The President announced the following Committees:

STANDING COMMITTEES.

FINANCE.
R. G. McLean,
R. R. McIlvaine,
J. B. Thompson,
Thomas Carroll,
Ruben Hills.

MEDICAL SOCIETIES.
J. B. Thomson,
D. Judkins,
J. C. Thompson,
A. M. Slocum,
J. W. Tullis.

PUBLICATION.
W. W. Dawson,
H. K. Steele,
J. T. Webb,
C. C. Hildreth,
M. B. Wright.

MEDICAL ETHICS.
G. V. Dorsey,
G. S. B. Hempstead,
Geo. Mendenhall,
Landon Rives,
Robt. Rogers.

EXECUTIVE.
J. G. F. Holston,
A. Ball,
Wm. Judkins,
John Davis,
I. C. Williams.

SPECIAL COMMITTEES.

SURGERY.
Jesse P. Judkins,
R. Thompson,
Berkley Gillet.

PRACTICE.
L. M. Lawson,
G. W. Bœrstler,
Robert Thomson.

OBSTETRICS.
Landon C. Rives,
H. G. Carey,
J. G. Rogers.

MEDICAL LITERATURE.
S. G. Armor,
R. J. Shackleford,
H. L. Thrail.

Dr. Bronson moved that the reading of the remaining papers before the house, be made the order of the day for to-morrow morning at 9 o'clock.

On motion, the Society abjourned until 9 A. M. to-morrow.

CHARLES WOODWARD, PRESIDENT.

W. W. DAWSON,
J. T. WEBB. } *Secretaries.*

THURSDAY, 9 o.clock A. M., June 8th.

President Woodward in the Chair.

Transactions of yesterday afternoon read and approved.

The President being compelled to retire, and in the absence of all of the Vice-Presidents, Dr. Gabriel was called upon to preside.

The order of the day being that of reading papers, Dr. C. G. Comnegys read one, of which notice had previously been given, on "THE ETIOLOGY AND CURABILITY OF PHTHISIS PULMONALIS."—(See Appendix J.)

This paper was discussed by Drs. Carroll, Mc'Ilvaine, John Dawson, and Comnegys, and on motion of Dr. Kincaid it was referred to the Committee on Publication.

The Committee on Admissions reported for membership Dr. Luther D. Waterman, of Cincinnati, who was elected.

Dr. S. G. Armor now read a paper, heretofore announced, on the "PATHOLOGY, SYMPTOMOLOGY, &c., OF LATENT PNEUMONIA.—(See Appendix K.)

On motion of Dr. J. N. Green, the essay of Dr. Armor was referred to the Committee on Publication.

Dr. D. Judkins moved the following resolution:

Resolved, That Drs. M. B. Wright, of Cincinnati, R. Thompson of Columbus, and J. S. Newberry, of Cleveland be appointed a Committee to report at the next meeting of this body, or earlier if possible, upon the propriety of a thorough revision of the code of Medical ethics.

After a rather free discussion by Drs. Judkins, L. M. Lawson, Mc Ilvaine, Carroll, S. H. Smith, R. Thompson, and Hills, the resolution was passed.

Dr. R. Thompson exhibited the "GOUGE MOUTH BONE CUTTING FORCEPS" mentioned on yesterday, accompanied by explanations of the instrument, its construction, uses, &c. Dr. Thompson remarked that a similar instrument had been lately manufactured in Europe and claimed as a new invention, but that he had invented and used this since 1848.

Drs. A. H. Baker, and L. M. Lawson both affirmed that Dr. Thompson had shown to them this instrument years ago, and that he was justly entitled to the credit of its invention.

On motion of Dr. Baker, Dr. Thompson was requested to furnish a description and plates of the instrument to the Committee on Publication, for insertion in the Transactions of the Society.—(See Appendix L.)

The Committee on Admissions reported for membership the following gentlemen, who were elected:

A. S. Dandrige, Cincinnati.	C. C. Parker, Dayton.
C. Mc'Dermont, Dayton.	J. W. Brooks, College Hill.

Dr. W. H. Mussey offered the following resolutions which were adopted:

Whereas, This Society desires that the Community shall be protected from the Medical practice of ignorant and irresponsible persons, therefore,

Resolved, That it is expedient that a Central Board of Medical Examiners be instituted, which alone shall have the power to decide upon the qualifications of candidates for diplomas and the right to practice in this State.

Resolved, That said Board shall also have the power of choosing the occupants of the various Medical Officers in all Institutions connected with the State, the basis of which choice shall be a public examination of applicants for such occupancy.

Resolved, That a Committee of five be appointed to deliberate upon and digest a plan and to prepare a memorial to the next Legislature, asking that a law be passed constituting such a Board, &c. But it shall be the duty of such Committee to submit the same to the next annual meeting of this Society for its action thereon.

After these resolutions were discussed to some extent by Drs. Mussey, Dorsey, Gordon, and McIlvaine, the Chair appointed, as the Committee provided for by them, the following gentlemen:

W. H. Mussey, Cincinnati.
A. S. Dandridge, "
R. Thompson, Columbus.
A. H. Baker, Cincinnati.
W. P. Kincaid, Neville.

On motion of Dr. Bronson, the vote of the Society making its next meeting in Zanesville, was reconsidered.

Dr. McMeens moved that the Ohio State Medical Society hold its next meeting in Sandusky. Lost.

On motion of Dr. Holston the Society decided that when it shall adjourn, it do so, to meet in Zanesville.

The report of the Committee appointed to investigate the claims of Dr. H. Cox, of Cincinnati, to membership in this association, was, on motion, taken up.

Various amendments to the report, suggestions, resolutions, &c., were offered, all of which were rejected. And after a general discussion of the subject, which was participated in by Drs. Rives, Dorsey, John Dawson, McIlvaine, Carroll, Webb, J. N. Green, M. B. Wright, Gordon, D. Judkins, and others, which the Secretaries did not hear.

Dr. D. Judkins moved the Previous Question, which was carried.

The question was now upon the adoption of the report of the Committee, viz.: that he be admitted a member of this Society, which, upon being taken, was decided in the negative.

A communication was received from Dr. Conner, and read at the Secretaries' desk, expressing his gratitude to the Society for being elected one of its Secretaries, and expressing his willingness to serve them, but was prevented from so doing upon this occasion by severe llness.

Dr. Hills, Chairman of the Obituary Committee informed the Society that the report upon this subject was prepared, that the morning session was now well spent, and that he would be compelled to leave the city and could not attend the meeting this afternoon to read it to the Society.

On motion Dr. Hills was requested to furnish his Obituary Report to the Committee on Publication.—(See Appendix M.)

The Society, on motion, adjourned until 2 o'clock this afternoon.

WEDNESDAY, June 8th.
AFTERNOON SESSION.—2 o'clock, P.M.

The President and Vice-President being absent, on motion of Dr. J. F. White, Dr. Dorsey was called to the Chair.

Transactions of the morning session read and approved.

Dr. C. Grant offered the following resolutions, which were, after some discussion, by Drs. Carroll, Dawson, and Grant, adopted:

Resolved, That to require that men shall be responsible to the law for the discharge of the duties of Surgeons, in a skillful and scientific manner, and yet to withhold the means and materials for making them good and efficient Surgeons, is inconsistent in itself, and oppresssive upon a large class of citizens, intent upon the general good of mankind.

Resolved, That the present law of this State imposing fine and imprisonment upon those who procure bodies for the purpose of dissection or for anatomical or surgical science, is inimical to surgical improvement, and against the very best interest of humanity.

Resolved, That there be a Committee appointed to take into consideration the propriety of, with the power to memorialize the Legislature for a repeal of the present law, entitled an "Act to secure the inity of places of Sepulture."

onformity with the requirement of the last resolution, the fol- gentlemen were appointed said Committee:

Dr. C. Grant,
" Thos. Carroll,
" John Dawson.

Dr. S. C. Gholson moved the following resolution, that as "The American Medical Society at Paris" feels a lively interest in the advancement of Medical Science at home, therefore

Resolved, That a copy of the Transactions of this Association, (when published) be forwarded to that Society.

Dr. McIlvaine spoke in commendation of this resolution and in high terms of the Society mentioned, and hoped that those gentlemen who are publishing Medical journals, those who are authors, and those who are publishing Medical or Scientific works, would send a copy to that Society for file in their library.

Dr. J. F. White, by the request of Dr. Dorsey, took the Chair.

Dr. Dorsey presented a TRUSS, invented by Dr. Pratt, of Michigan, and moved that a Committee be appointed to examine it, and report to the meeting as early as practicable.

For this purpose the Chair appointed Drs. J. W. Brooks, L. M. Lawson, A. H. Baker—Committee.

Dr. Dorsey moved that the consideration of the resolution, offered by him last year, and taken up yesterday, which was suspended to hear the report of a Special Committee, be now resumed. The resolution reads thus :

Resolved, That the officers of the several County or District Societies, auxilliary to the State Medical Society, be requested each year to report to the Secretary of said Society the names of all their members, to serve as a basis for the Medical statistics of the State, and that the several Medical Colleges of the State furnish the Secretary with a list of their graduates annually, and that persons applying for membership in this Association shall be admitted *only* on a certificate of membership in a local Society, where such exists, embracing his county.

After some discussion, the resolution was adopted, and may be regarded as an amendment to, or modification of Article III. of the Constitution.

Dr. John Dawson moved the following :

Resolved, That Dr. C. G. Comegys be appointed a Committee to investigate the influence of Climate in the production of *Phthisis Pulmonalis*, and report at the next meeting of this Society.

Dr. L. M. Lawson offered the following resolution:

Resolved, That it is the sentiment of this Society, that it is contrary to the liberal spirit of the Profession to patent Surgical or Medical Instruments.

Dr. D. Judkins moved as an amendment:

Resolved, That it is just as contrary to the liberal spirit of the Profession to take out a copy-right for a book.

The question being taken on the amendment, it was carried.

The resolution of Dr. Lawson as amended by that of Dr. Judkin's, being before the house, remarks upon it were made by Drs. McIlvaine, John Dawson, D. Judkins, L. M. Lawson, Baker, and Dorsey.

The resolution so amended was rejected by a close vote.

Dr. Grant moved the following which was adopted.

Resolved, That it is not derogatory to Medical dignity, or inconsistent with Medical honor for Medical gentlemen to take out a patent-right for Surgical or Medical Instruments.

On motion of Dr. Crume, it was

Resolved, That it shall be the duty of the Treasurer to notify each delinquent member and of the amount of his delinquency, and that if he should fail to remit the sum, it shall be the duty of the Treasurer to notify the Committee on Publication, of his non-compliance with the terms of membership, which notice will be sufficient warranty for the Committee to withold the transactions which would otherwise be the due of said individual.

Dr. Brooks moved the following:

Resolved, That the members of this Society render their cordial thanks to the members of the Erie County Medical Society, for the very generous invitation extended to this body to hold its next meeting in Sandusky City.

On motion of Dr. Armor, it was

Resolved, That a Committee of three be appointed to collect the Vital Statistics of the State, and to confer with the Indiana State Medical Society in relation thereto.

On motion of Dr. McIlvaine the resolution was amended, so that the Committee shall consist of twenty-one members, instead of three, and that one shall be selected from each congressional district.

DISTRICTS.

District 1.	Samuel G. Armor.	District 7.	Joshua Martin.
" 2.	J. Davis.	" 8.	Berkley Gillet.
" 3.	P. M. Crume.	" 9.*	
" 4.	G. V. Dorsey.	" 10.	Thomas McNally.
" 5.*		" 11.	Chas. F. Thomas.
" 6.	J. G. Rogers.	" 12.	J. B. Thompson.

DISTRICTS—CONTINUED.

District 13.	R. R. McMeens.	District 17.*	
" 14.	Salmon Hudson,	" 18.*	
" 15.	I. N. Burr.	" 19.	John Delamater.
" 16.	J. D. Cotton.	" 20.*	

District 21 J. T. Updegraff.

The following document was presented by Dr. McMillen, Dr. Patterson being absent, on behalf of the "Drake Medical Society," of Columbus, and on motion, the subject was referred to the Committee on Medical Ethics.

"At a regular meeting of the Drake Society of Columbus, Ohio, on Monday evening, May 29th, 1854, the following resolutions were unanimously adopted:

Resolved, "That the public journals of this city represent that Cyrus F. Beebe was attended in his last illness by Dr. G. W. Maris, in connection with an avowed and well known enemy of the regular Profession of Medicine.

2nd. "That the tendency of a general knowledge of such fellowship is to give license to a similar course on the part of the Profession generally.

3rd. "That such affiliation with the enemies of the profession merits the severest rebuke.

4th. "That this Auxiliary Society requests the State Medical Society, through the proper Committee, to require satisfactory explanation of Dr. Maris, or in case of his failure to give such explanation, to erase his name from the list of its membership.

5th. That Dr. R. J. Patterson be a Committee in behalf of this Society to present these resolutions to the consideration of the State Medical Society at its approaching session."

COLUMBUS, June 1st., 1854.

I hereby certify that the above is a correct copy of the resolutions passed by the "Drake Medical Society," on Monday evening May 29th, 1854. W. R. THRALL, *Secretary*.

On motion of Dr. Mount, it was

Resolved, That this Society deems it expedient to appoint three delegates to the State Medical Society of Indiana.

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* Any member of the Ohio State Medical Society, residing in the 5th, 9th, 17th, 18th or 20th, Congressional District will please consider himself as belonging to this Committee, and it is desirable that he will act accordingly.

On motion the resolution was so amended as to provide also for appointing the same number of delegates to the next meeting of the Kentucky State Medical Association.

The Chair appointed as delegates to

W. Mount, R. R. McIlvaine, C. G. Comegys, } *Indiana.* James Hopple, Landon Rives, L. M. Lawson, } *Kentucky.*

The following resolution was adopted unanimously:

Resolved, That the thanks of this Society be tendered to the Trustees of the *Ninth Street Methodist Church,* for their kindness in granting it the use of their spacious and comfortable room.

On motion of Dr. Comegys, the following resolution was adopted:

Resolved, That a Committee of three be appointed to report at the next annual meeting, the propriety of obtaining the enactment of the bill of Dr. J. L. Vattier, for the establishment of a Bureau of Vital Statistics for the State of Ohio.

The Chair appointed John Dawson, R. Thompson, R. J. Patterson.

The Committee appointed to examine, and report upon the merits of the Truss, exhibited by Dr. S. Pratt, of Michigan, submitted the following:

"The Committee appointed to examine the Truss, exhibited by Dr. Pratt, of Michigan, beg leave to report, that, having examined said Truss, recognise in it a very neat adaptation of different parts of former instruments, and think it may prove useful and convenient to those effected with Hernia."

Very Respectfully,

J. W. Brooks, A. H. Baker, L. M. Lawson, } Committee.

Dr. W. Buckner read before the Society the following "Memorial," presented by him to the Legislature of Ohio, during its last session, and made some interesting remarks upon the importance of an institution, such as is suggested and recommended in the petition.

MEMORIAL

OF

Dr. Wm. Buckner, of Cincinnati,

PRAYING FOR THE ESTABLISHMENT, BY THE STATE OF OHIO, OF AN EYE INFIRMARY.

In House,—March 29, 1854.—Presented by Mr. Brown.
Laid on the table, and ordered to be printed.

A memorial to the General Assembly of the State of Ohio, on the subject of establishing an Eye Infirmary in this State.

Your memorialist begs leave respectfully to present to your honorable body, that the present Hospital arrangements for treating diseases of the eyes, are totally inadequate to the wants of those who need the assistance of the public charities, and that every day the necessities of the poor, and the inadequacy of the public institutions are increasing. The State of Ohio has already distinguished herself by her munificence in providing for the comfort and education of those who had been heretofore, on account of natural disadvantages, left either to the cold charity of the public, the dungeon of the madman, or to such poor shifts and devices as uneducated instinct might suggest, for the provision of daily bread.

Her extensive system of poor laws, also, indicate the watchful care with which she regards helpless indigence. No State in the Union has better understood her duties in this regard, or more conscientiously fulfilled them.

This leads your memorialist to hope, that the suggestion he is about to make, will meet with your approbation, since it is a part of the same high and noble public beneficence of which the above are such distinguished members.

There is no misfortune which can befall a man so terribly overwhelming as the loss of sight. Art can supply a lost limb, writing can stand for an useless tongue, or can carry intelligence to an deafened ear, while labor can be executed by either the maimed or the

deaf mute; they need not necessarily become a burthen forever on the fund of the poor. But when the strong man is stricken blind, when the light of heaven deserts him, and the cunning hand can no longer find its way to the tool wherewith the laborer and his family were supported, when all without is night, and all within is despair, what is there left but the charity of the State, or still worse, the miserable dependence on relations, who every morning and every night wish to be relieved of the burthen.

The State has nobly provided for the youthful blind, but nothing has been done for the stalwart man, who is just beginning his road to the regions of eternal night.

We know that ninety-nine per cent, of the blind, (except those congenitally so,) have lost their sight through neglect, or through poverty, being unable to lose the time or pay the money necessary to effect a cure. Many a case of common inflammation, which a week's repose and simple remedies would have cured, has terminated in total blindness and the poor-house for life. Many another of severer affections of the same delicate organ, has terminated similarly, when ordinary care would have preserved the eye in all its original vigor. There is nothing more insidious than these optical affections; easily cured generally, if taken in time and properly cared for, but if neglected nothing more certain of a fatal termination.

Our hospitals and poor houses afford but poor facilities for the treatment and cure of these optical diseases. Patients and paupers are admitted only when all power of labor is gone, too late for the cure of blindness. Besides, the diseases of the eye are so numerous, the structure of the member so delicate, the sensibility of the organ, so acute, that it requires far more study than generality of the Medical Profession are able to give to it, to enable one to prescribe with certainty or to operate with safety upon it.

It is moreover, as a means of precaution, that your memorialist would recommend some special provision for the treatment of those diseases. The expense of a week or two's medication now, would save the poor fund of the Blind Asylum the expense of years of education and lifetime's maintenance.

In the city of New York there has been for years an eye infirmary, established by private enterprise, but assisted by donations from the corporation as well as by grants from the State. From a report of this institution it will be found that in one year there were 2053 patients

under treatment, most of whom, had they not been thus succored, must have totally or partially lost their sight, and so have become in a greater or lesser degree a burden to the public funds. Of this number, 1437 were discharged cured, 190 relieved. Eleven were incurable, because application was made too late, while the rest remained under treatment.

In twenty-nine years, this single institution treated 34,452 patients, who from poverty (for none but the poor are treated by it) would else have gone unattended until the hospital had received them on the brink of blindness, and the poor house offered them a refuge till Potters field should claim them at last.

In your memorialist's own practice, there is scarcely a day, in a populous city, that he is not presented with some such cases as is above detailed, when the incipient disease might be arrested, but when the necessity of laboring while labor was possible, hastened the inevitable result.

Institutions of this kind are not uncommon in the old world, and all experience proves that the physicians of hospitals devoted to a certain special and exclusive class of diseases, become more skillful in the management and cure of such diseases than the most distinguished and skillful general practitioners.

Desiring only to call the attention of your honorable body to what your memorialist believes to be a pressing want, without presuming to offer any plan for your consideratian, he would suggest the appointment of a committee of five of your body, who should inquire into the necessity of such an institution, and report to you such measures as their wisdom may suggest in the premises.

Respectfully, &c.,

W. BUCKNER.

Dr. Gordon moved the following resolutions :

Resolved, That this Society approve of and recommend to the State Legislature of this State, the passage of a bill in accordance with the memorial prepared by Dr. Wm. Buckner, of this city, and introduced by the Hon. H. B. Brown at its last session.

Resolved, That the Secretary forward a copy of these resolutions to the Legislature, by placing them in the hands of some member who is favorable to the passage of said bill.

Resolved, That a Committee of three be appointed to draw up a suitable memorial to the Legislature, and that each member of the Society use his influence with the members of the Legislature, in securing the passage of such a law.

The Chair appointed as said Committee Drs. T. W. Gordon, Wm. Buckner, J. B. Thomson.

On motion of Dr. Updegraff, it was

Resolved, That the members of this Society tender their harty thanks to their professional brethren in Cincinnati for their generous hospitality, and do most cordially approve of the plan of conducting Medical banquets without furnishing wine or alcoholic drinks.

Dr. Cume offered the following resolution, as an amendment to the By-Laws :

Resolved, That the Secretary be instructed to notify each member, where his name occurs on any of the Committees, who have work to perform for the next meeting, within two weeks after adjournment. This being an amendment to the By-Laws of the Society, it lays on the table to be acted upon at the next meeting.

The President then appointed the following members of this Society as Delegates and alternate Delegates, to the next meeting of the American Medical Association :

DELEGATES.	RESIDENCES.	ALTERNATES.	RESIDENCES.
N. Atwood,	Russelville.	R. W. Gabriel,	Dublin.
T. M. Baker,	Millbrook.	R. L. Rea,	Oxford.
Alvin Belding,	Ravenna.	A. Dunlap,	Ripley.
A. D. Bigelow,	Cleveland.	W. T. Taliaferro,	Cincinnati.
Jas. Bronson,	Newton Falls.	H. H. Darst,	Tippecanoe.
A. Carey,	Salem.	H. J. Dunaho,	Sandusky.
H. G. Carey,	Dayton.	A. F. Teal,	Carroll.
E. Carney,	Berkshire.	D. A. Lathrop,	Bellview.
Joseph Cole,	Akron.	J. F. Potter,	Cincinnati.
H. S. Concklin,	Sidney.	A. Wilson,	Sidney.
J. D. Cotton,	Marietta.	B. F. Hart,	Harmar.
D. A. Cox,	New Paris.	S. Fisher,	Waynesville.
John Davis,	Dayton.	Wm. Clendenin,	Cincinnati.
J. V. Dawson,	Bellbrook.	T. B. Johnston,	Xenia.
G. N. Dorsey,	Piqua.	B. Neff,	Piqua.
Harry Fassett,	Johnstown.	S. R. Chandler,	Duncan Falls.
C. Gaston,	Morristown.	J. C. Kenedy,	Batavia.
B. Gillet,	Springfield.	C. Falkner,	Hamilton.
T. W. Gordon,	Georgetown.	J. Q. Oliver,	Cumminsville.
J. N. Green,	Bainbridge.	B. B. Seward,	West Liberty.

DELEGATES.	RESIDENCES.	ALTERNATES.	RESIDENCES.
L. D. Griswold,	Elyria.	Salmon Hudson,	Whittlesey.
J. Helmick,	Harrisburg.	W. J. Sullivan,	W. Middlebury.
G. S. B. Hempstead	Portsmouth.	C. F. Thomas,	Pomeroy.
J. G. F. Holston,	Zanesville.	C. C. Hildreth,	Zanesville.
R. Hills,	Deleware.	H. Austin,	Mansfield.
R. C. Hopkins,	Cleveland.	C. S. Muscroft,	Cincinnati.
D. Judkins,	Cincinnati.	Wm. Wood,	"
G. W. House,	Harrisburg.	A. Jones,	Wilmington.
R. Houston,	S'th. Charleston.	Saml. Wilson,	Wooster.
L. D. Sheets,	Dayton.	D. S. Lyman,	Batavia.
W. Judkins,	Cincinnati.	I. C. Williams,	Bloomington.
T. McNally,	Chillicothe.	J. H. Brooks,	Bourneville.
L. C. Rives,	Cincinnati.	John M. Kellog,	Cincinnati.
Geo. J. Sachse,	Lancaster.	J. M. Bigelow,	Lancaster.
E. B. Stephens,	Lebanon.	E. Fisher,	Lebanon.
J. T. Updegraff,	Mt. Pleasant.	Benj. Tappan, Jr.,	Stubenville.
N. S. Townshend,	Elyria.	E. Kelly.	Elyria.
Wm. Trevitt,	Columbus.	W. L. McMillen,	Columbus.
R. R. McMeens,	Sandusky.	E. S. Lane,	Sandusky.
Joshua Martin,	Xenia.	W. R. Kable,	Bellbrook.

On motion the Society adjourned to hold its next meeting in Zanesville on the first Tuesday in June 1855.

CHARLES WOODWARD, President.

W. W. Dawson, } *Secretaries.*
J. T. Webb, }

APPENDIX.

[A]

VALEDICTORY ADDRESS

OF

JULIUS T. TAYLOR, M. D.,

AFTER RETIRING FROM THE CHAIR, AS PRESIDENT AT THE MEETING HELD IN CINCINNATI, JUNE 6th, 1854.

MEMBERS OF THE OHIO STATE MEDICAL SOCIETY:

Upon assuming the duties of President at the last annual meeting, I thanked you for the honor conferred, and promised to discharged those duties as faithfully and correctly as my abilities would permit. How that pledge was fulfilled you are the judges.

As we are again assembled at another annual meeting, and I am about to vacate the Chair, permit me to renew my thanks for that mark of distinction that you were pleased to unanimously confer upon me, and believe me when I say that it will be cherished in my memory with the most profound gratitude.

In retiring, permit me to say a few words to you upon the importance of a more perfect and extended organization, and give to you a few of the noble results that have followed like organizations in days past.

In the selection of these remarks, I have been guided by a desire to avoid touching upon the many practical subjects that belong to our science, which are appropriately referred to the various Committees from whom we expect full reports.

We have assembled in obedience to the constitution of our Society, which declares that there shall be held an annual meeting on the first Tuesday of June, and that the Society shall constantly have in view:

First. The Association of the Profession for the purpose of mutual recognition and fellowship.

Second. The maintenance of union, harmony and good government among its members, thereby promoting the character, interests, honor and usefulness of the Profession.

Third. The cultivation and advancement of Medical Science and literature, and the elevation of the standard of professional education.

The objects which our constitution declares that we shall have constantly in view, are of the noblest and most elevated character, and it should be the pride of each member of this Society, and of every Physician in the State, to see them successfully carried out.

How can we do it successfully if we do not have *union of action* and a most perfect organization?

The organization and association of individuals, for the promotion of all great objects, have been acknowledged to be of the highest importance, in all ages and in all countries, in times past—let those objects tend to whatsoever purposes they might—for the preservation and support of governments—for the advancement of spiritual affairs—for the successful carrying on of great enterprises in commerce, or for the prosecution of any of the more common duties of life.

Then, if organization has been acknowledged to be of great importance in all of the ordinary doings of life, how much greater is the necessity for organization amongst those whose objects are the advancement of science? The influence that mind has upon mind when brought together in social and friendly connection, is amongst the most powerful of all stimuli that can be applied to man, for the purpose of arousing his energies and awaking within him all of the latent talent that shall be there sleeping. A free conversation upon a single subject, or upon a diversity of subjects, during an evenings association of intelligent persons, is frequently the means of awaking in some mind, ideas that often lead to the most profound results. This is true in reference to the common associations of individuals, in the social or family circle—but it is doubly true in reference to the association of individuals for scientific purposes. When there is a full and free interchange of sentiments in an interlocutory manner, or by the reading of reports upon various subjects, or by the presentation of facts, cases, and results that have been arrived at by the study of different persons upon various subjects, or by several upon the same subject, there is often presented to the minds present, a hint, a word, a practical de-

monstration, or the confirmation of some principle, around which there may have been obscurity thrown in the mind of some other, that the most careful thought, or profound mathematical calculation, could not remove by the most diligent and repeated labor; until assisted by the unthought-ed aid of some friend or friends during a social conversation, or by the report or experience of some other person at some scientific meeting.

To prove this true, it will only be necessary for me to state a single instance wherein such a case occurred, which led to the confirmation of one of the most brilliant and profound discoveries that has ever been presented to the mind of man. I mean the discovery and confirmation of the laws of gravitation by the immortal Newton. We are told that Newton, after the labor of seventeen years in careful calculation, profound study, and diligent research after the laws of *gravitation*, tried the rule upon which he supposed the law to depend, and found that he was yet in the error of a small fraction. His labors were renewed with redoubled energy, his calculations were all gone over with again and again; and yet he could not arrive at the key by which he was to unlock the door from which was to come the greatest gift that a scientific world could receive, by which the thousand mysteries that then surrounded the knowledge of the laws of the stellar world, were to be solved and made as plain as any of the other laws with which they were acquainted. He labored on until his great mind became wearied, when he laid aside his manuscript and abandoned the pursuit of that, which was to be of so much value to the world, and immortalize himself.

And why? Because he could not, unassisted, arrive at the principle or the fact upon which the law depended.

Time passed on until a meeting of the Royal Society of London was held, which was attended by this great and giant minded man, probably without the least expectation of hearing one word, or obtaining one idea that would in the least assist him in discovering the law which he was in search of.

But what must have been his astonishment and gratification when he heard, during the discussions which were had at that meeting, that a fellow-laborer "had just closed a most accurate measurement of the diameter of the earth."

We are told by his biographer, that he returned home, and with impatient curiosity spread before him his old computations, contrasted them with what he had learned at the meeting of the Society from the

labors of a fellow-worker, upon probably a kindred law. By this, renewed zeal was given him, and as he went on, thus assisted the great law, for which he had been so long laboring, was now, by this timely and God-sent aid, becoming more and more apparent. It is said tha it was too much for him to bear. He became nervous, and was obliged to leave the labors of a few computations to a friend. When they were completed, the law which proved, that "every particle of matter in the universe, attracts every other particle of matter, with a force or power, directly proportioned to the quantity of matter in each, and decreasing as the squares of the distances which separate the particles increase," was found to be true and universal. The *Law of Gravitation* was discovered. Newton had been assisted to find the key which unlocked the mysteries of the universe. What a triumph! What a mighty conquest! Greater than that of conquering a thousand worlds, by the force of arms. And all this was done through the instrumentality of the giant mind of one man, assisted by the unasked labors of a member of an Association of scientific men, who were assembled for the purpose of endeavoring to promote science by their united efforts.

I ask—will not the fact that such mighty and glorious results have been accomplished under such circumstances by the labors of a Society, organized for the purpose that ours is, arouse each one of us that is present to renew his efforts in prosecuting the great work that our founders have started for us?

We may not attain to the hights of a Newton, but we may possibly attain to the successful investigation of that which shall hereafter be found to be of immense value to the human family, and thereby cause our names to be enrolled by posterity upon the record of the great and good that have preceded us.

We, as members of the Ohio State Medical Society, have a great responsibility resting upon us, the successful carrying out of the three great objects that our founders declared we should always have in view, at all subsequent meetings.

This great work can best be accomplished by the united and friendly efforts of every physician in the State, being organized for the promotion of the Science of Medicine. Our Society was organized in the year 1846, by the association of twenty-five members. From that date the labors of its members have been devoted and zealous, and

their efforts have been crowned with the happiest results, in the productions of many reports and papers relating to our science, which are of great importance to the Profession generally.

Since then, numerous truly educated physicians have become members, so that at our last annual meeting we found enrolled three hundred and nineteen. This, however, is but a fraction of the many truly and correctly educated physicians of the State of Ohio. Some of them may object to becoming members of this Society from the fact, that the results of our labors are yet so small. We would say unto them "come in and assist us, as the harvest is yet large and the laborers few."

The results that will follow this organization, if it shall continue to increase in numbers until it has enrolled the name of every physician within the State, that has the true Science of Medicine at heart, and who will be willing to lend his individual aid to the promotion of a general Science of Medicine, will soon be found to present an interest so great, and elevating an emulating influence so profound, an education so perfect, a friendly intercourse so extended, a professional harmony so complete, and a general desire to aid each other in all that shall tend in the least to advance our cause, that the most skeptical mind will soon be obliged to acknowledge, that our cause is just and our objects valuable.

To accomplish a result so desirable as the one would be, if every physician in the State should become a member of this Society, will require a considerable time, a continued labor, a correct deportment in all Medical etiquette, a fixed determination in every member to look to the interest of all as to that of his own. These, however, are but small acquirements, and I have no doubt but they can and will be lived up to by all of us with cheerfulness and fidelity. If such shall be the case, as a Society, we have nothing to fear, our cause will be carried onward and upward, until it will be crowned with the most perfect triumph.

While we are operating here as members of the Ohio State Medical Society, we must remember that our Science is not local, that it is not confined alone to our State, but that it is the general and the common property of the whole world. Therefore we must be careful that whatever we do shall be in strict accordance with the most stringent laws that govern our science.

We must remember, also, that there is at this time going on in our sister States, and other parts of the world, a renewed desire for the correct advancement of the Science of Medicine. Energy is being redoubled all around us, the age of *Theory* is passing away, while the age of *Facts* is coming in its place, and that as we are a Society, representing the third State in our glorious Union, upon which scientific eyes will be turned with keenness and great interest, we must be exceedingly careful that our doings will be such as will reflect back a character that shall be elevated and honorable.

As an organization, are we using all the means within our reach for the promotion of the Science of Medicine in its strictest purity, and most extended usefulness ?

Have we organized in every county, an auxiliary Medical Society ? which has enrolled upon its list of members, all of the truely devoted physicians, located within its limits ? If not, permit me to say to every true physician: "go on and organize such, and enroll yourselves as members therein !" And let your labors be diligent and your observations general, in reference to diseases amongst you ! Report each month to your Society, and then let an annual report, embodying all the information which may be collected, be made to this Society. By such co-operation we will soon obtain the most valuable Medical statistics of our State. Unless this be done our labors will be imperfect.

Have we well regulated primary teachings for the correct direction of the Medical Student, when he commences his studies ? If we have not, let this Society look to the subject and endeavor by report, to urge upon each Physician to examine himself and see whether he is willing to impart only such instruction as will tend to correctness, as the Student shall progress step by step in the different departments of our science. If the *primary* teaching is not correct, will not the *secondary* be exceedingly retarded ?

As a perfect system of well-regulated Medical Education is the base upon which our glorious superstructure must depend for permanence and durability, it is essentially necessary, that Medical Colleges should be *Chartered* by our State Legislature, with powers sufficient to carry out all of the objects that our Society shall deem proper, and I am happy that our Legislature has *fully* complied with this important requisition. We have Charted within the State of Ohio, five Medical Colleges, all of which are organized and supplied with full "Faculties" for teaching all of the various branches that belong to our profound science.

With their organization, we, as a Society, have nothing to do. But with their teachings and their means, for the dispensation of a correct and extended Medical Education, we are, or most assuredly should be, their censors. And it should be the duty of each member of this Society to carefully watch and scrutinize the teachings and doings of the several Schools, and if he should find them engaged in perfect, extended and elevated plans for dispensing a true Medical education, give them a most hearty and cordial co-operation. But if any be found not living up to the golden rules of our science, let their deficiencies be known, and if of importance and fully substantiated, then let every member of this Society withold his influence from such institution and endeavor to divert all students from their Halls.

If we do this we shall certainly be successful in obtaining a correct system of Medical Education. But if we shall fail to do our duty in criticising and watching the teachings of our Medical Colleges, a reproach will be heaped upon us.

I am happy, however, to be able to say, that upon actual personal examination of several of our Medical Colleges, I found them in possession of all the means requisite for furnishing a complete Medical Education. The buildings are of ample size, their lecture-rooms well lighted, and arranged for hearing, seeing and comfort. Their Museums are well fitted with every preparation, aparatus, drawing or cast that can possibly be wanted or needed under any circumstances, to illustrate any Medical subject. Indeed, I may say with truth, that they are not inferior to like institutions in other places. They are noble institutions, and it is certainly a noble pride when we admire them. It is too frequeutly the case that we only look from home for greatness, while it may be found at our very doors. I say this without a wish to excite comparisons—but would most earnestly urge upon every member of this Society to lend his aid to the Medical Colleges of our State, over which he is a censor, as long as he shall be certain that they are dispensing a true Medical Education.

To the Faculties that fill the Chairs in the several Medical Colleges, I will say, be careful, zealous and correct in all your Medical instructions, for upon you rests the highest responsibility in reference to the future elevation of the Medical sciences. If the fountain is not pure, how can that be which emanates from it? It is said by *some* that there is "*Young Physic,*" but permit me to say to you, that in teaching as well as in learning, that it is "*Old Physic,*" that must be

taught and learned. There may be *young* teachers, and *young* learners, but there must not be *Young Physic* taught, for *our science* is as old as man.

For the purpose of exciting the emulation of the members of this Society, and to stimulate them to renewed exertions, I will briefly say a few words upon what is being accomplished by the laborers in some of the other departments of science by organization. For it must be recollected that at this time all the different sciences are being prosecuted with renewed and redoubled energy. The science of Astronomy is, at this time, making the most rapid strides. Under the influence of new telescopes of great power, in foreign countries, and by the erection of observatories in different parts of our country, through the munificence of many of our intelligent citizens.

When we remember the great results which were accomplished long ago by the Chaldeans, Chinese, Persians, Greeks &c., and then remember that such men as Copernicus, Kepler, Gallileo, Newton, and a host of other renowned individuals of an ancient date had been engaged for years and years, in the investigation of this particular department of Science, and that their labors had been crowned with such glorious results, we should almost be ready to exclaim that the Science of *Astronomy* was at least perfect and that no more labor need be bestowed upon it. But such is not the fact, and notwithstanding the demonstration of the laws which govern the planets in their orbits, and a thousand other equally profound and startling demonstrations that have been made, yet it is said by the most learned of its investigators, that the Science of Astronomy is yet in its infancy! Do you doubt the truth of this? Look at the labors of our own Mitchell, Bond, Gills, and many others, who have been laboring with so much assiduity in our own country, and with such triumphant results; and look to the Herchels and others of England, and see what they have done and hear what they all say! and then hearken to the startling discoveries that are being daily made by these eminent laborers in the Science of Astronomy, through the aid of the powerful Telescopes of Lord Ross and others.

I have not time nor would it be proper here for me to enter further upon this interesting subject, but will say, that if each one of you will examine the subject at his leisure that he will find evidences to convince him that his labors should be renewed in his own department.

The Geologist also has been actively engaged in penetrating the crust of the earth, and making plain all the seeming mysteries that a want of correct knowledge had obscured it with. They have demonstrated, that wonderful changes have taken place at different periods in the crust of the earth, and have proved that these were the result of great internal force. They have demonstrated that the land upon which we now are was once the bed of the ocean, and was the supporter of animal life in great abundance, from the most minute Zoophite to the most gigantic Cephalopode and Trilobite. This they have proved true by the production of the remains of the animals themselves, which are to be seen in all their beauty and singularity in the many Geological cabinets that now adorn our country. They have again demonstrated that the earth after having been thus submerged, has then become dry land and the supporter of forests of the most gigantic kind, which after flourishing in the greatest luxuriance were converted into a new and important substance—Coal, with which this great State is found to be abundantly supplied. Then they prove that after this period had existed for a long time, sufficient to produce results that an all Wise Being saw would be necessary for the future support of his people, that were to be, it was again submerged in the depth of the ocean, and became the supporter of animal life in various types according to the period in which they lived, &c.

It would be interesting to follow this profound, beautiful, and highly interesting science, and name to you many of the distinguished individuals who are now zealously and ardently engaged in making us acquainted with its intricacies through the instrumentality of organized Societies. But I forbear, and will urge upon each of you to examine this interesting subject, and then ask you to use your best endeavors to get the next Legislature of this State to relieve her people from the odium, which rests upon them, from the fact they have not made a perfect Geological survey of the State, and therefore have developed her valuable internal resources. Notwithstanding the great results which have already followed the labors of the Geologist, yet those who have gone further in their investigations declare that the science is yet in its infancy, and requires redoubled energy on the part of its votaries in the prosecution of their labors, by more perfect organizations.

The Botanist, too, is actively engaged prosecuting his labors for the perfection of that science which is of much importance to the whole community generally, and absolutely essential to the perfection of the

Science of Medicine. May I ask? Have we among us those who are ardently engaged in the study of this department, and who will be prepared to give the results of their labors at each annual meeting? The laborers that have been engaged in the department of Botany, have been signally triumphant in their success, and yet they, like the laborers in the other sciences, declare that this science it yet in its infancy, and requires the most diligent investigation, long continued, to bring it up even with the other sciences, as cultivated in this State.

I might go on in multiplying the different organizations upon kindred sciences, to prove to you the acknowledged necessity and value of a full and perfect organization for the successful advancement of science, but will forbear, believing that enough has already been said of kindred sciences to satisfy the most skeptical, upon the subject, and I will therefore direct your attention to the results that have followed the labors in the Science of Medicine.

The Science of Medicine is as old as Adam, and has had laborers for its advancement from his time, as is most clearly proved by the holy Bible, which makes frequent and honorable mention of the physician in numerous places as "Physician, heal thyself." "Is there no balm in Gilead?" "Is there no Physician there?" "The skill of the Physician shall lift up his head;" and in the sight of great men he shall be in admiration."

Profane history also, from its earliest period bears the most undoubted evidence of its existence, and of a powerful organization having been kept up to advance it towards perfection, and to correct the errors of superstition, ignorance and impiricism, which seemed to have existed in those days in great abundance. But I have not the time nor the inclination now to discuss the doings of the Physician in the periods of his greatest antiquity, and shall, therefore, proceed to give a few of the many glorious results that have followed the labors of those that have preceded us in the study of this important science.

First. Let me introduce to you the doings of one, who should always be held up as an example, and who did so much for the advancement of our science, that posterity has accorded to him the name of "*Father of Medicine*," I mean, Hippocrates, who lived in Cos, about four hundred years before the Christian era. Let us look at him when a young man, and see him studying the manuscripts that were within his reach—that were descriptive of the science of medicine as

it had existed—and see him catch from them a spark of what has since grown to be a great flame—the inductive *philosophy of our science.*

When we reflect upon the disadvantages that this profound laborer was beset with upon all sides, while engaged in his studies; and then remember the glorious results that followed him, we are struck with astonishment and should be stimulated to redouble our exertions for the advancement of our science. He had but few of the great lights that now exist in science to assist and cheer him onward in his profound investigations. Human anatomy was not known, nor was it permitted to be studied. Yet that did not deter this anxious seeker after truth, from the most diligent and careful study. He saw that something was yet wanting to perfect that science, upon which his whole mind was centered, and that something, he believed, was a correct knowledge of anatomy. How was he to obtain it? Upon man he could not study it, for the most stringent laws prevented him. Therefore, he turned his attention to that which was next best—the examination of the Brute Creation. Hence we find him studying the anatomy of dogs, monkeys and other animals, in the prosecution of his great labors, the results of which were sufficient to place the science of medicines upon a base so durable as to have withstood all the attempts which have been so frequently made, by the enemies of the science, for its overthrow. The labors of this great man and his contemporaries, when fully organized, were sufficient to establish a reputation for the science of medicine in Greece, which swayed the world for a long series of years, until its followers became careless and negligent, and gave up their organization for its advancement, when it was taken from them and carried to Rome, about 150 or 200 years before the Christian era.

At Rome, upon the arrival of many of the great collection of books which had been conquored from the Grecian people, during their wars, a new impetus was given to the sciences generally, and to none more particularly than to the science of Medicine. The name which was most prominent, in that great revival in the study of our science, was Galen, upon whom posterity has placed an immortal renown which will be as durable and lasting as science shall be. He, like his predecessor, Hippocrates, instituted perfect organization, excited great emulation in his co-laborers to present all that should be useful or instructive, to the observation of the public, so that all might be benefitted by the individual labors of each.

By his own diligence and assiduity, and the assistance of others, he established a school of Medicine at Rome, from which was dispensed all of the correct elements of the science of Medicine that were in existence at that time. By these means he was enabled to establish for Rome a reputation in Medicine which became the renowned of the world, and gave laws to the science, which now stand as beacons guiding us to perfection and greatness.

Time passed on, the great Galen died, and his followers became careless and regardless of his correct admonitions, in fact; the people of Rome became degenerate. They neglected organization, the general diffusion of knowledge, and all that their great guides had told them was so essential to their future prosperity, and they, too, fell and lost the sceptre of the Science of Medicine. It was then carried to Arabia, where it was cultivated with all the zeal, energy, perfect organization, and correct diffusion, that had characterized its advancement in Greece, and Rome, until it attained the highest degree of celebrity. So that about A. D., 852 of the Christian era, we find that the Arabians were possessors of the honors that belong to the Science of Medicine, which they continued to enjoy for a long period of time, when they, like their Illustrious predecessors, forgot their obligation to science, and the sceptre fell from them.

Will it not be proper for us, here, to stop a few moments in the examination of the progress of our Science, and take a review of the causes that led to its downfall in those three great and powerful nations that have just been named. I will be brief. The physicians forgot God and his teaching, they neglected the admonitions of those, who had elevated them to their greatness, they became enamored of war and its trophies, they ceased to organize themselves for the advancement of their Science, forgot all social and domestic happiness, and like the whole nation, became a wild, rude, and barbarous people, amongst whom no science, no love, no happiness, nor friendly intercourse with different nations were tolerated. Let us then as the descendants of illustrious teachers and promulgators of the Science of Medicine, be cautious how we use the noble legacies that have been so long and so directly handed down to us. Let us remember the history of the past, and endeavor, by our labors to make ourselves more profitable to the generations that shall follow us, than did our early predecessors.

After the downfall of these three great nations, in which our Science had been so successfully promoted, a long period elapsed, which was

covered with the greatest darkness, and of which history gives us but an imperfect knowledge. I shall therefore carry your minds to the sixteenth Century, when the light of the Science of Medicine began again to burn with the most cheering brilliancy.

Prior to this period, but little had been known by the investigators of our science in reference to the correct laws of the *circulatory* system of man.

An imperfect idea had been inculcated, it is true, of a lesser circulation, for at least one hundred years, but a perfect system of the circulation of the blood yet remained to be discovered. Enough had been discovered at this time by different laborers in science to convince many that nature is governed by *perfect laws*. When the rule of perfection came to be applied to the anatomy of man under the scrutenizing mind of Wm. Hervey, he saw that there was a want of harmony or perfection in the circulatory system.

It was known that blood was circulated in the veins, but it was not known that blood was circulated from the heart into the arteries, and from them into the Capillaries, and from them into the veins, and from them into the heart again, a space was intervening which had not been accounted for by a perfect law. This illustrious man began investigating the matter with the most diligent case, making profound investigations in anatomy, lenghtened research in the works of the laborers that had preceded him, and he became fully satisfied, that a perfect system could be discovered. His labors were continued with renewed energy, and yet he could not satisfy himself, and like the immortal Kepler, and his followers, who had discovered the want of harmony in the law of space between Mars and Jupiter, he continued his labors with the most indefatigable energy for at least nineteen years. After which time he began to feel emboldened to make some public declarations as to the perfection of the law of the circulation of the blood.

And to his great surprise and mortification, the intimation met with the most decided opposition, and unbelief from many of his old and most respected contemporaries. This, however, did not deter him from further investigations, by which he was soon enabled to not only declare a belief in the perfect law, but to make the most positive demonstration of its existence, upon human anatomy.

This bold and startling announcement was received with distrust and mortification by the old men of the profession, and was greeted with the most enthusiastic joy by the younger, and was engrafted at once into the elements of the Science of Medicine as one of the greatest discoveries that ever had been made in the laws of nature.

My object in bringing before you this most important discovery in the perfection of our science, is to show the disadvantage that investigators labor under, when there is not a perfect and free organization among their contemporaries. I do not wish to be understood that such organizations will make great men, but that they will assist them greatly in the prosecution of their labors and likewise destroy opposition, and help to develope principles and facts with greater speed and correctness than can be done by many persons without organization. Who can doubt for a moment that if Hervey had been assisted by the labors of his contemporaries, in full organization, engaged upon the various departments of science, as Newton was by his, that he would not have accomplished his brilliant discovery in a much shorter period of time?

The brilliant discovery of Hervey was sufficient to immortalize his name as a great public benefactor. To our science it was invaluable, and served to overthrow the thousand errors that had existed which had retarded our science exceedingly. Wherever it reached it was tried and acknowledged to be true by all investigators that have followed. A new era in our science was the result. The age of *facts* commenced, and all future anatomical investigations were governed by its laws. It gave a new impetus to the progress of our science by exciting its votaries to organization and renewed zeal. They were convinced that if so much could be done by one man singly, that a community of minds working for the same purpose could do much more. And I am happy to find that the feeling which was engendered in the votaries of the science of Medicine at that time, by the promulgation of the discovery of the immortal Hervey, has continued to spread, until it has covered the whole civilized world. So that now, organizations are found in England, France, Germany, Italy, Austria, Russia, and in all of the United States, and elsewhere, which are laboring for the advancement of the Science of Medicine, with a zeal commensurate with the profoundness of our cause. Their efforts have been so general in the dissemination of the Medical Science, that all barriers are broken

down, and *all* laborers in the science are now hailed by each other as brothers, let them belong to whatsoever country they may. No country is now acknowledged to be the sole dispenser of Medical authority, as was the case when Greece, Rome, Arabia, England or Germany in days past, held the sceptre alone for a time, each and all are now acknowledged to be the superior *only*, as they lead the way in carrying onward our science to perfection.

The improvements that followed this general dissemination of the Medical Science were exceedingly great in all the departments, but in none more so than in the department of Surgery. Sight was given to hose blind from birth; hearing to the deaf; dangerous wounds were cured, under simple dressing, by nature alone; bleeding arteries were tied, and life preserved when death would have been *certain*, but for this knowledge. Great operations have been performed for the prolongation of life; the Parotid gland has been extirpated; hideous deformities have been removed. The success of the skilful surgeon has continued to progress, until at this time his powers are looked upon as almost supernatural by the uneducated, while to us his doings are simple and yet profound, because they are always conducted upon the perfect laws of nature.

I might go on in the other departments of our science, and give many equally brilliant results that followed the new era of investigation and organization, but shall forbear with the mention of two only.

By the light of induction all things had to be proved. After this no suggestion was taken for a demonstration, and, of course, all votaries had to become laborers. Their works had to be proved true before they could get credit for them. Under the establishment of this profound rule the immortal Jenner commenced his investigations for discovering an antidote to that scourge of the world, *Small Pox*, and by patient toil, and continued experiments, he was at last enabled to give to the world, through the Science of Medicine, one of the greatest and most benevolent gifts that it had ever received. By it, Small Pox has almost been robbed of its greatest terror!

There is yet one other glorious result that has emanated from the teachings of an organization like this, which I cannot forbear to mention. I mean the results that have followed the labors of the French Institute, in the person of the illustrious Pinel—a laborer in our science who was impelled by the inductive philosophy of its teachings, to in-

stitute a set of careful experiments for the purpose of demonstrating that the maniac could best be cured by little restraint. While his country was being threatened by blood and carnage, by the political demagogues who were aspiring to fame in that cruel way, this noble philanthrophist devoted himself to the completion of his task. For the sake of illustration, go with me for a few moments to the Chamber of Deputies in the troubled kingdom of France, in 1792, and hear the members discussing all other subjects than philanthropy, benevolence, and science. See them wild with rage, and exulting over the wholesale murder of the people. And then behold a modest man enter those halls, whose sole business was to plead for the diffusion of benevolence, philanthropy, and charity, as taught by our science, to the *Insane*.

Hear him plead with the members of that body for the privilege of dissemenating them according to his own wishes, hear them reject his propositions, and then behold this noble man of our science, again renewing it, until at last, under the influence of his, I may say, divine teachings, they grant his benevolent request. Then go with me to the Hospital and Prison of the Lunatic (for they had no Asylums in those days) and see the noble *Pinel* present to the keeper his permit to enter the cells of the madmen, and to set them free. See the poor keeper horror stricken! Shrinking from him, and looking upon him as a madman himself, until at last, becoming satisfied that the permit *was* correct, he opens the door! Hear the wild raving of the maniacs increase! Hear the horrid imprecations of many of the distressed that were confined within. See the noble Pinel enter those loathsome cells, with all the composure of a philanthropist, and approach one that was chained and raving, wild and furious, and hear him in tones of mercy tell the maniac that his errand was to set him free, wait a few moments for the words of mercy to make an impression, and then behold the raving man become quiet, and then see the man of our science take his seat by his side, and endeavor, not only to completely calm his mind, but to engage him as a laborer, in his great and benevolent undertaking. Hear the mad man promise, not only quietness, but the most perfect obedience. And then see the noble Pinel knock off the fetters that had so long bound him. And behold him moving on in the errand of mercy, until he released a great number from their dreadful confinement.

This is no fiction, it is but a faint description of one of the glorious results that has followed the teachings of the Science of Medicine,

and has been the means of alleviating the condition of the Lunatic, by the introduction of that noble philanthropy, generally, throughout the world, until there is scarcely a civilized government that has not adopted it. Behold the noble edifices that now adorn our State for the mental treatment of the insane, and then say whether organizations for the advancement of the Science of Medicine have not produced results worthy your most decided approbation.

I must close the interesting subject of the benefits and necessity of organization, as best calculated to advance the Science of Medicine.

Enough has been given, I hope, to convince those, who are members of our Society at this time, that we have a great work to perform. That eyes are turned upon us, and that hearts ought to be with us. For who does not feel that the Science of Medicine is valuable, and of holy origin, having been practised by the Savior of the World and his Apostles.

But how did they practise? By the Almighty power of God. They gave sight to the blind, hearing to the deaf, healed the sick, and cleansed the leper! While we only do it by a careful observance of God's laws, by correct study, and united application, acknowledging all the while, that like Paul, we plant, and like Apollos we water, but God alone gives the increase.

We are now surrounded by credulity, superstition, and, I may say, wilful and malicious ignorance, which is attempting to delude the World by deception and sophistic teachings.

Their works will be vain, for they are not based upon truth, and therefore must have an end.

We cannot, however, hope to destroy these evil communications entirely, but we may by perfect organization, indefatigable exertion, united efforts, and strict application of the correct principles of our science to the alleviation of the ills that flesh is heir to, so completely obscure them, that their doings will be ineffective.

In conclusion permit me to ask, if there is one present, who does not feel, that it is good to be here, and he will be benefitted by being so intimately associated with many of the great and good of our profession, whose years have been long, and labors continuous for our advancement.

Let us *all* then come up to the altar of our science and renew our pledge, that we will hereafter labor with the single purpose of promoting the Science of Medicine generally. Let us labor as a band of brothers, who are of one family, determined to promote a cause, which we believe to be of such high antiquity, of such noble purposes, and of so much benefit to the human family.

[B.]

REPORT OF THE COMMITTEE ON PUBLICATION.

The Secretaries of the Ohio State Medical Society, by virtue of this office, constituted members of the Publication Committee, would, as such, submit a conjoined report.

As Secretaries, they have endeavored to discharge the various duties assigned them with accuracy and promptness.

They have placed before the Legislature of the State the resolutions, passed by the Society last meeting, approving of recommending Dr. J. L. Vattier's "Bill to provide for a Bureau of Statistics in the Secretary of State's office."

In following the obligation imposed upon them further, they have conveyed by letter to the widows of the seven physicians, destroyed in May 1853 by the New York and New Haven railroad calamity, the sympathies and condolence of this body at their bereavement.

They have sent diplomas of membership to Drs. :

J. A. Warder,	G. W. Sampson,	W. L. Schenck,
R. H. Tipton,	Saml. G. Armor,	J. E. Matchett,
Adam Mosgrove,	S. W. Fuller,	D. K. Green,
Joshua Martin,	I. Hendershott,	Saml. Martin,
Elijah T. Collins,	L. Rigdon,	L. M. Lawson,
C. N. Hoagland,	Joshua Clements,	W. H. Scobey,
C. Smith,	Jno. Dans,	T. C. Owen,
G. Paoli,	B. Neff,	W. T. Sharp,
J. G. Rogers,	J. R. Dawson,	J. M. Mosgrove,
W. B. McAroy,	L. C. C. Gille,	H. Van Tuyl,
Jno. Treon,	I. A. Coons,	C. S. Kaufman,
W. Mount,	J. W. Goddard,	I. K. Gilbert,

J. G. Poage, Jas. Crook,

M. S. Houston,	Oliver Crook,	D. H. Brinkerhoof,
D. A. Cox,	A. Koogler,	Landon Rives,
E. S. Lane,	I. N. Gard,	W. W. Sanger,
W. L. Peck,	Wm. Bell,	J. N. Smith,

Taking their names from the Constitution in the order they were signed, leaving some twenty-two members in full standing without them. The reason of this apparent neglect, being that there were no more diplomas stricken off, and we were unable after very many efforts to procure either the plate, or the seal of the Society, that we might strike off more. Your Committee would recommend the propriety of instituting an inquiry upon the subject, and have sufficient diplomas obtained to meet the demand.

The following members elected at our last meeting are entitled to them who did not receive them :

J. N. Converse,	S. J. Smith,	R. J. Shackelford,
W. B. Chapman,	C. G. Comegys,	P. S. Conner,
Jas. Hopple,	Thos. Wood,	W. M. Dawson,
Edw'd. B. Stevens,	Wm. Buckner,	W. H. Lamme,
Isaac Kay,	W. S. Newton,	Nath'l. Strong,
W. McHenry,	J. B. Craighead,	Job Haines,
J. J. Quinn,	Henry H. Seys,	J. G. F. Holston.

Wm. Huber, J. W. Green,

As members of the Publication Committee, we would report that we had published for the benefit of the Society 1550 copies of the transactions, and sent Post-paid to each member of the Society, four copies, together with one copy of the minutes for 1852, by mail or by express, with the exception of copies to Drs. Jacob Hammond, W. R. Rable, N. K. McKensie, P. Pence, S. F. Kunkenbrod, John White, David Wilson, whose P. O. addresses could not be obtained, none having been attached to them.

The packages to these members can be had at the Secretaries desk.

Your Committee had also 200 copies of Prof. Armor's Prize Essay, published in Pamphlet form, for distribution to the different editors throughout the State. This was done at the request of Prof. Armor, he preferring to meet the additional expense, than have his address go forth in a mutilated form as directed by the Society,

All of which is submitted.

HENRY R. STEEL.

Cincinnati, June 6th, 1854.

[C]

REPORT OF THE COMMITTEE

ON

MEDICAL ETHICS.

BY

JOHN DAWSON, M. D., Chairman.

The appointment of Standing Committees is one of the duties annually performed by our Society. But the necessity or propriety of each one of the Committees making reports, of course, depends upon a number of circumstances. That some should do so is absolutely indispensible; the members of others may find it impossible to collect the proper material; and others, where material is in abundance, may, perhaps, think that it will not conduce to the interests of the Profession to give it publicity.

To the class last mentioned, we presume belongs the Committee on *Medical Ethics*. This Committee, as its name imports, has imposed upon it the obligation of making known to the Society the moral standing of the Profession throughout the State. A work implying a knowledge so comprehensive and delicate, is very difficult to perform, and, of course, what is said, should be received with due allowance.

Morality in the Medical Profession is not a matter of spontaneous growth, any more than it is in any other department of Society. The impulses of the human heart, when unrestrained, do not always give rise to actions that are unexceptionable, and calculated to promote social life. Impressed with the truth of such views, our fathers in the Medical Profession, commenced very early to criticise the conduct of each other, and lay down certain rules to which all exercising the duties of a Physician should be subjected. From time to time these rules have suffered the changes, and received the additions which, in the estimation of the good, and those having the most enlarged experience they

required. At the hands of the American Medical Association they have lately been again revised, and may now be regarded as being as perfect as any that can be prepared.

It constitutes no part of our present scope to enter minutely into a consideration of the relation of the profession in Ohio to these rules as we find them fixed up in our Code of Ethics. A few, and only a very few of them most essential to the integrity and success of our calling will be noticed. From among these we select the following, coming under the title of "*Duties for the support of Professional character.*"

"Every individual on entering the Profession, as he becomes thereby entitled to all its privileges, and immunities incurs an obligation to exert his best abilities to maintain its dignity and honor, to exalt its standing, and to extend the bounds of its usefulness. He should, therefore, observe strictly such laws as are instituted for the government of its members—should avoid all contumelious and sarcastic remarks relative to the Faculty as a body, and while by unwearied diligence he resorts to every honorable means of enriching the science, he should entertain a due respect for his seniors, who have by their labors brought it to the elevated condition in which he finds it."

A doctrine clearly set forth in this section, is, that the Profession of Medicine has a *character* which is the property, not of a single member or of the members of any particular region, but of the Faculty of the whole country. This character is the result of the labors of the upright in heart and the self-sacrificing for centuries; and, as a consequence, it is no wonder that there are many to be found who venerate it, and exert their best abilities to maintain its dignity and honor.

The introduction of an individual into the Medical Profession consists in nothing more nor less than the clothing of him with the character of the Profession, and in imparting to him the right to exercise every thing pertaining to it, for the good of Society and of himself. The possession of such a treasure, together with the rights pertaining to it, must necessarily imply on the part of the individual thus invested, certain obligations, for without the existence of these, the relation would be imperfect. These obligations, among other things, require of him that he shall exert himself in every reasonable manner, and on all proper occasions to maintain the portion of professional reputation entrusted to his care; and that he shall also add to the common stock. For it has been in this way, and in this way alone, that our common character has been built up, has been formed. Like the mountains in the

bottom of the ocean, it is the result of the joint labors of great men, faithfully and industriously carried on for a long series of years.

The question might here be raised as to the manner in which the Profession in our flourishing State is demeaning itself with reference to the moral standard we have adopted. Is it laboring with zeal and a singleness of purpose to promote the most desirable results, the elevation of our calling to the standard of the greatest possible degree of perfection? Are we all ready to make sacrifices both public and private for the general good?

Questions of this kind are not so easily disposed of as might at first view seem to appear. In looking over our State, and taking an imperfect view of our Physicians, and the manner in which they are demeaning themselves to the Profession and to the people, we see much to excite admiration and gratitude. Laboring for less pecuniary reward and at greater sacrifices of leisure, and all the conveniences and comforts of life, than what in these times pertains to any other kind of business, they seem, nevertheless, as a general rule to be conducting themselves very creditably, so far as an honest and faithful observance of the essential rules of Ethics are concerned, while at the same time they are performing their duties to the people frequently under circumstances of danger, with alacrity.

While such is true with regard to the great mass of the quiet and working part of the Profession, it is a matter of mortification that the same cannot be universally affirmed.

In looking around at the causes which embarrass the onward progress of the profession, our mind has been attracted to one, that in many sections of the State has had quite a prominent existence. We allude to the practice, in these times of "Liberty of Speech," of "speaking evil of each other." At present, perhaps, more than at any former period, there is a great rivalry going on between practicing physicians, as well as between those engaged in teaching. All the energies of the race appear to be called out for the purpose of making an effort, and it is not difficult to recognize the general prevalence of the sentiment, *"success now or never."* Under such circumstances, and in the general rush towards the accomplishment of purposes, much is done that should be left undone, and many things left undone that should be done. If we were to attempt a specification of what seems to be within the province of improprieties, we could not omit to notice under this head a practice that has got currency of medical men of making *ante mortum*

dissections of each other. The object of the process, to keep up the figure, does not seem to be for the purpose of finding out what organs are well developed, and capable of moving off physiologically, but of finding out the weak ones.

The latter are selected as being very proper to lecture on in the social circle; and they scarcely ever fail to secure the most profound attention. Time was in our profession when very few engaged in these exercises, and it was supposed that they were not very well calculated to promote dignity or result in profit. These days have passed away, and many now resort to them as a means of enjoyment, of securing notoriety, and obtaining position. *Tempora mutantur, et nos mutamur in illis.*

What has been sketched is not a mere fiction. Our conversation about each other, when surrounded by the circumstances of rivalry in practice or in teaching, too often wants candor, liberality, and dignity. Old men are denied the veneration and respect due to their years and services; younger ones, who happen to be prominent, are criticised, persecuted and occasionally slandered.

Involuntarily springing up in our minds just here, is the rumor of a serious outrage upon etiquette, which occurred during the past year, and in which some of our members were concerned. It constitutes no part of our desires to revive the recollections of the profession on a matter, the occurrence of which, no doubt all engaged in, heartily regret. Nor is it any part of our recognised duty to attempt an investigation, as to which of the parties were most in fault. We have no right to admit the existence of any circumstances that should serve to extenuate conduct so objectionable, and so much at war with the dignity of our science. Our views are, that it was all wrong, uncalled for, and might have been avoided.

We regard it as unnecessary to allude to the influence of such conduct upon the profession in the public mind, the place where we most need position at the present time.

As far as it becomes known, it will be every thing else than salutary. Upon the reputation of the individuals concerned in it, whether defeated or victorious, there will most likely be an illustration of that orthodox maxim, which says, that "The way of the transgressor is hard;" and it might at first view appear proper that our Society should be satisfied with that kind of redress for the injuries it has sustained. Had an offense of equal character been committed by individuals re-

siding in some obscure portion of the State, such might be the most available disposition of the case. But, unfortunately, it has happened at a point which many of us would have been proud to regard as the Athens of Medical Literature for the whole West; and some of the individuals concerned in it have aspired to a position, and been recognised as teachers, not only of the various sciences which go to make up the Medical, but also of the *Ethics of the Profession!*

Whether in the future we are to continue to recognise them as teachers in the latter capacity, is a question not by any means free from difficulty. Perhaps they can promise us in the way of satisfaction something, like what the excentric Abernethy on a certain occasion offered to his students. This individual, as all know, was justly celebrated for his knowledge of Hygiene, and all the means calculated to promote health and long life—still he observed none of them himself, but, on the contrary, was in the habit of indulging very frequently in excesses and fits of intoxication. After concluding one of his inimitable lectures to his pupils, on the subject of temperance, in eating and drinking, etc., he remarked in the conclusion, that he wished no one to follow his own example—that he himself was a little like a certain parson and the guide board, both pointed the way, but neither followed the course.

A model Physician, with respect to troubles similar to those we have noticed, and as a remedy for them, has proposed the following prescription: "Love your enemies; bless them that curse you; do good to them that hate you; and pray for them that despitefully use and persecute you." This prescription has always had a high reputation for efficacy, and if not needed just now as a *remedy*, it might not be bad policy to take it as a *prophylactic*.

During the last year our attention has been called by some very respectable Physicians to that part of the intercourse between professional men called *consultation*. There appears to be, as far as we can learn, a growing indisposition among rival practitioners to meet each other at the bed-side, for the purpose of deliberating upon what should be done for the sick. Not long since a position got currency, and was published in some of the leading Journals of the day, the substance of which was, that when one Physician called another one in to consult with him, it was equivalent to giving the latter a mortgage upon the patient. Although it is to be regretted very much that a position so humiliating should be thrown broad-cast before the profession, notwithstanding, it was in connection with some humorous and useful suggestions on other

subjects, still the sentiment may be nothing less than a kind of spontaneous expression of a feeling that is more general than what might *a priori* have been expected. Without doubt there is in many regions a great falling off in the way of consultations. The testimony to this point is abundant.

In looking about for the causes of this state of things, we can see no propriety in attributing it to fruitless results to patient or Physician. This would reverse the plainest axioms of professional experience, and would be an insult to the judgment of the good and great wherever Medicine has been successfully cultivated. To the novice consultations are indispensible, and to even the most experienced, they are of not less value than that of occasionally saving a valuable life.

Taking this for granted, other things must be invoked for an explanation. Is our intercourse at the bedside always characterised by pure motives—a proper care for the sick, and a desire to promote in every possible way the reputation of the attending Physician? We wish these questions could be answered in the affirmative. Once in a while when a physician is called in consultation, he takes it for granted that his services have been required because of his superior skill. This may or it may not be the case. In either event his conduct should be the same. There should be nothing like an assuming dictatorial course, or an attempt to criticise previous treatment.

Every word said by the consulting Physician, every motion he makes, and every expression of his countenance is observed and watched with the greatest possible precision; and should there be any thing in these that conflicts with what has been said or done by the attending Physician, or that even has appearances in that way, it results in destroying or impairing confidence in the latter, and his further attentions to the case, become disagreeable to himself, and unsatisfactory to the patient.

Another phase of the matter a little more humiliating, is occasionally observed. There are many Physicians, whose general intentions are to do right, to deal honorably, and still it is hard work for them to let the opportunity pass unembraced, that will exalt them even at their worthy neighbor's expence. They seem to be unable to resist selfish impulses, and as a consequence, injury sooner or later to the Physician in attendance and to themselves is the result.

A course of procedure somewhat different in character, but not less objectionable in its consequences, not unfrequently takes place in

changing the prescriptions of the attending Physician, merely for the sake of change. It matters not how well the treatment may have been adapted to the case, it is usual for some to think that their services will not be appreciated, *unless some change is made in the Medicine.*

Here the real object of consultations, that of giving the patient the benefit of science, and the inspiring him with confidence in his Physician, is sacrificed upon the altar of fallacious reasoning and selfishness, and perhaps a suspicion awakened in his mind, that the previous treatment has been wrong.

Changes in the treatment should as much as possible be avoided at the time a consultation takes place ; and when even proper or necessary, they should be postponed, for the sake of the attending Physician, as long as would be compatable with the safety of the patient—certainly never made for the sake of a change or to gratify a whim of the consulting Physician.

According to the nature of the case it results that young practioners, and Physicians, who are just commencing business in a new location, most frequently require consultations. The consulting Phycisian is under such circumstances selected from among the old and well-tried. This is perhaps true in a large majority of cases. Now, this natural circumstance often begets on the part of the consulting Physician a feeling of prefessional importance, sometimes austerity, and occasionally dogmatism. He is apt to imagine that his services are required, as remarked in a previous connection, because of the possession of superior attainments. This may be the *reason* why he is called, and it may not be true. Many of our young men at the present time are so well posted up, that their practice would compare favorably with that of their seniors, in all of the cases requiring for their successful treatment the possession of accurate knowledge. Indeed, it is by no means impossible, that an old experienced Physician may very frequently be benefitted by the suggestions of one of our industrious and energetic young men. Why not, therefore, in order to promote the frequency of consultations change the order, a little, and have the seniors to request, where consultations are demanded, not the services of another senior, as is usually the case, but the services of one or more of the juniors. Old blood and young mixed together, sometimes secures results, for the accomplishment of which it might safely be presumed, neither separately would be adequate. No harm can possibly result

from a move of this character. It will exhibit a commendable liberality on the part of the older members, and will result in encouragement to the young, to many of whom indeed, who are just commencing and worthy, it will come as a "God send."

Impressed with the belief, that the value of consultations must frequently consists in inspiring confidence in the Physician having charge of the case, and in assisting him like one mariner would another that had been tossed about by contrary winds, to keep his latitude and longitude right, until safely anchored in the port of safety, we cannot avoid suggesting the propriety of a review and revision of the whole subject. Consultations cannot be dispensed with without incalculable detriment to the sick, saying nothing about their value, when honorably conducted to the profession. But we repeat it, that it is the testimony of Physicians all over the State, that they are diminishing in frequency, that many of the older Physicians are avoiding them as useless, while the younger ones are complaining that they seldom ever get through with them without being injured. To us, the existence of such facts, are everything else than agreeable, and of course our only object in alluding to them is that our Society may look them in the face and make an effort at their correction.

A subject following within the range of Ethics, and, perhaps, of sufficient importance to merit a passing notice is that of the compensation that the Physicians of our State are receiving for their services. With but few exceptions it appears to be insufficient. To some extent this has always been the case, but at the present, it is eminently so. Every department of labor or service has exacted from community increased rates of remuneration, while the attentions of the Physician, his deprivations and sacrifices have underwent so far as increase of compensation is concerned no change. Indeed, we are not sure but that the reverse is true. Physician's bills, from all that we can learn, are now paid off with less money and more reluctance than they were a quarter of a century since. Many of our best educated young Physicians find out on entering the profession, that the compensation for their services, if even they succed to a reasonable amount of business, is less than what can be obtained in many of the ordinary pursuits of life, and, as a consequence, they abandon the profession. Many too, who have labored in the ranks of the profession for years, find out at last that they are failing to secure the means necessary to sustain the infirmities of life, and in disgust turn their attention to other pursuits. What now is the remedy for this state of things? Heretofore, reliance

has been placed upon the getting up of "Fee Bills." Badly these have worked in most places where they have been tried. Too frequently the people have looked upon them as combinations to extort exorbitant charges, and it is humiliating to acknowledge it, but it is nevertheless a fact, that they have too often had their suspicions strengthened by the testimony of some worthless member of the profession, one of which can be found almost in every neighborhood, and who, by uniting in the clamor, have found it the most available way of obtaining business. In view of this state of things and of the propriety of doing something, no measure seems to us more likely to be attended with good results than a general move upon the part of the older Physicians, those well established in the confidence of the community. Let them by concert of action take the proper ground in relation to the matter and maintain it, and the work will be done. What they do is generally regarded as right, should it even interfere with the usages of the purse. Besides, they owe it to themselves and to the Profession to lead off in a measure so necessary at the present time, and one that unless remedied, our Profession will frequently have to be united with some other kind of business in order to furnish the means of a reasonable support.

Before closing what we have to say it might not be improper to allude to the general standing of the profession at present in the public mind. Like many things, to which we have alluded, this is not what most of us desire. A constant fire kept up with great industry by all those, who muster in the ranks of the irregulars, has had the effect of destroying the confidence of large portions of different communities in the superiority of Scientific Medicine. It were well if this injurious influence was exerted only by the unwary and ignorant. Then we could look forward with some hope to the changes which the schoolmaster is making upon the race, as the era of deliverance from the trouble and annoyance. But how frequent, and how common is to see those communities, that we regarded as being the most intelligent, taking the foremost rank in the patronage of the most transparent humbugs of the day. And what is worse, many of our distinguished men—those entrusted with the care of Church and State, and enjoy a large portion of public confidence, not only seem an easy prey to the mountebank, but, when occasion requires it, are ready to aid by their personal or official influence in almost any thing, that detracts from the character and claims of medicine, scientifically studied and scientifically practiced.

Besides the operation of causes, *external*, we have those of an *internal* character, the influences of which are decidedly more fatal. To some of these we have already alluded in another connection, and only notice them here to increase attention to them, as our worst enemy. It is an old maxim that teaches the doctrine, that if we would have others respect us, we must respect ourselves. We have seen enough to convince us all, that, although our existence as a faculty is indispensible to the welfare of humanity, still we cannot rely on utility alone, as the means of securing confidence, and of giving us popularity. To amenity and straight forward upright conduct, to a disposition to treat each other under all the circumstances of rivalry, as gentlemen, as brethren; to the habit in all our connections of avoiding contumelious or sarcastic remarks in relation to each other, to union among ourselves, and to our industry in cultivating every department of nature and art, available in the management of physical infirmities, we may look with confidence as being the only means of placing us in a position to command the respect and influence to which we are so justly entitled.

[D.]

BOTANY OF OHIO, BY J. S. NEWBERRY.

(Manuscript not received by Committee on Publication.)

PRIZE ESSAY.

BY

M. B. WRIGHT, M. D., of Cincinnati.

DIFFICULT LABORS AND THEIR TREATMENT.

"True things instead of Pleasant things."

The eagerness with which the professional mind has engaged in its search after undiscovered truth, or in its efforts to revive rejected opinions, has given it often a proclivity to extremes. These extremes, like opposite promontories of a great continent, are of little exclusive value. Their importance consists in the facilities and inducements they may have offered, for the exploration and cultivation of the space which lies between.

These remarks apply, not only to the Science of Medicine in general, but to its obstetrical department. General principles have been established as lights for our guidance, and the successful application of many has stamped them with a true value, but errors in practice were introduced at an early period, and have descended in almost every obstetrical work of which we have any knowledge. Our object in writing this Essay is to aid in the correction of some of these errors.

The least appearance of opposition to the announced opinions of distinguished Medical men, and the practice of their numerous followers, may give rise to the charge of presumption. But encouragement is given in the outset of our present undertaking, by the reflection, that truth contains as much intrinsic value expressed by those trudging along the humbler walks of the profession, as when inculcated by the Professor in his chair, or transfered from page to page throughout a long line of standard publications.

It will be admitted by those who have had a full share of experience in the treatment of difficult labors, that a few absolute rules cannot be applied successfully to every case. Much is necessarily left to the judg-

ment and tact of the practitioner. While, therefore, nothing will be found in this paper of an arbitrary character, there will be an independent attempt to correct errors, to lesson the perplexities of the accoucheur, to mitigate suffering, and to save life.

A ready and successful management of difficult labors pre-supposes an intimate knowledge of those which are natural. And if by natural labors are understood those which terminate spontaneously, and without involving necessarily the safety of either mother or child, shoulder presentations may be considered the true type of unnatural or difficult labors, for they almost always demand extrinsic aid.

The satisfactory termination of difficult labors depends upon the correct adaptation of art to the principles of science. Traction is a mechanical act, but to be successful in delivery, it must be made in conformity with scientific details, with due regard to the relation of organs and tissues. The convex surface of the fœtus is correlative with the concave surface of the uterus. If they were inanimate, rigid bodies, the relations of their several parts could not be much changed unless the curved lines of the one, were moved along the curved lines of the other. Their partial flexibility does not exempt them from the operation of the same principle.

The uterus undergoing gradual distention by the growth of the fœtus, and by increase in the quantity of liquor amnii, is not from this cause alone excited to an expulsion of its contents. Let a strong and sudden mechanical force be applied to the fibres of the uterus, even to a limited extent, and contraction will speedily follow. If any portion of the foetus should be pushed forcibly against the fundus of the uterus, by attempts to rectify a malpresentation, a more than corresponding resistance would soon apprise us of a want of adroitness, and the probabilities of failure. The hand of the manipulator in the vagina, imparts a sense of fulness, and induces expulsive efforts on the part of the mother. Pressure on the internal face of the perineum, or along the recto-vaginal septum, urges the uterus to renewed or more energetic action. Simple contact of the uterine and fœtal surfaces in turning, does not produce undue contraction of the uterine walls. The presence of the hand, added to that of the fœtus, within the uertus, is a common cause of irritation and expulsive force. But the fact which we most desire to enforce here, is, that when the fœtus, in the operation of turning, is moved in straight lines, and sensibly displaced the uterine fibres with which it comes in contact, it is speedily

forces back to its original mal-position ; nor can its displacement be easily rectified, except it be moved in conformity to the curvatures of the cavity in which it is contained.

Difficult labor, arising from the presence of either, the right or left shoulder of the fœtus, at the brim of the pelvis, is not common. Indeed, some prominent obstetricians know nothing of it from experience. He who refuses to examine its nature carefully, however, on this account, will find in the hour of trial, that he has been untrue to himself, and that the lives of confiding and beloved ones, are in double peril. Difficult labors, in truth, cannot be successfully managed without a knowledge of their character, not to say the possession of tact derived from experience. Without the one, he cannot exercise the other. In natural, a want of knowledge would be more excusable than in unnatural cases. The former may terminate favorably, in the midst of *inactive* ignorance ; the latter *require action*, guided by an enlightened judgment. A man may justly congratulate himself that he has never been entrusted with the management of a difficult case of labor, but he should not cherish the belief, on this account, that his next case will not require special interference. With the present knowledge of the profession, it is impossible to determine the nature of a presentation from external appearance, or from the feelings of the pregnant woman. And it is hardly to be presumed, that a Physician will examine all his patients during the progress of gestation, with a view to ascertain the kind of presentation he is to meet; admitting, that in some cases, the position of the fœtus may be ascertained by manipulation through the walls of the abdomen, and by vaginal touch. Hence, the importance of being prepared to treat every case that may occur, in the best possible manner.

It has been claimed, that nature is adequate to the accomplishment of her own wise designs, and that shoulder presentations may be left with safety to the spontaneous action of the uterus. None, among the controlling spirits of our profession, have enforced this doctrine more strongly than Denman. He contended that by the alternate contractions of the uterus, the shoulder was moved from its position, until the head or breach occupied its place and became the fixed presentation. It may be admitted, indeed, we know, that the shoulder has receded, and the breech has subsequently presented in one case, and the head in the other. Hence the language of Dr. Denman—"spontaneous evolution of the fœtus"—may still be retained.

At a subsequent period, Dr. Douglass, of Dublin, gave a different explanation of the manner in which spontaneous delivery was accomplished in shoulder presentation. The accuracy of his views have been acknowledged by more recent writers, who have had opportunities for observation.

Dr. Churchill says, "the head and the shoulder depressed in the pelvis, are fixed, and the remainder of the body doubled up, is inch by inch forced into the pelvis, and through the external parts, until all below the arm is expelled, leaving the case to terminate as a breech or foot presentation. At no part of the process is the arm at all retracted; but if moved at all, it is still further protruded, the name of "spontaneous expulsion," given by Dr. Douglass, is therefore more suitable than that of "spontaneous evolution." Still, the question is not, whether spontaneous delivery is accomplished in these cases by "evolution," or "expulsion," but whether the Physician should stand idle, and hope for delivery by the long continued agonies of his patient.

By referring to the rough sketches appended to this paper,* and by reading the following quotation, some faint idea may be formed of the intense and protracted suffering to which a woman is subject, during "spontaneous expulsion," at full term.

"Immediately after the rupture of the membranes, the parts diminish in size by the compression they undergo. The first period is the analogue of flexion in the presentation of the vertex, of extension in that of the face, and of the lessening of the parts in the presentation of the pelvic extremity. Then the shoulder descends gradually, and, in proportion as it enters the excavation, it executes a movement of rotation, which places the head on the horizontal branch of the left pubis, and thence under the pubic arcade. After this movement the arm disengages, and passes out of the vulva; sometimes the expulsion of the arm takes place before this period. When the rotation is performed, the period of the descent of the trunk is complete; the side of the fœtus is pushed into the excavation by gliding on the right sacro-iliac symphysis, while the shoulder remains immovable. After the side, the pelvic extremity descends, which also pursues the same direction. Finally, the perineum distends, and then successively pass out at the anterior commissure of the perineum, the lateral and superior portion of the chest, the side properly so called, the hip and pelvic extremity

* See figures 1, 2, 3, 4, 5.

In proportion as these parts are delivered, the head and left arm enter the excavation, but they are soon expelled, and, in most cases, the head does not undergo its movement of internal rotation. In a word, it presents at parts which have been excessively dilated, and it is not solicited by them to perform this movement of rotation. Such is the course pursued, when the dorsal surface of the fœtus corresponds to the surface of the pelvis."

Not only does a labor of this description require unparalleled voluntary efforts—not only does it involve extreme suffering of body and mind, but many patients have died before, or soon after delivery; and, alas, too many of those who may have survived, have found themselves entailed with incurable injury, or infeebled general health.

This is not all. According to M. Velpeau, only twelve children were alive after "spontaneous expulsion," out of one hundred and thirty seven labors.

It is almost certain from the statements of those in whose judgments we are bound to confide, that spontaneous expulsion cannot take place, even with the hazards already enumerated, except in cases where the fœtus is small, or the pelvis unusually capacious.

That a fœtus of full size may pass through the pelvis, the shoulder or side continuing as the presenting portion, without necessary injury to the mother, is proven by the painful details of the following case:

The patient was a young German woman, in labor for the first time. A shoulder presentation was detected at an early period by the midwife, first called in attendance, who, with uncommon prudence and forethought, suggested the necessity of an accoucheur more experienced and skilful than herself. A messenger was speedily dispatched for a Physician of their choice, who, soon after placing himself at the bedside of the patient, decided that the arm which had prolapsed was a leg. To expedite delivery, the arm was seized and was made to sustain for a considerable time strong traction. Sufficient force, however, could not be applied by means of the naked hand to withdraw the child. A towel was interposed, and after repeated efforts and renewed energies, the arm, together with the clavicle and scapula, were torn from their attachments. This, to those present, was a new mode of proceeding, and not being exactly in accordance with their feelings or judgment, the doctor was requested to withdraw.

The Physician next called, finding an unpromising state of affairs, invited us to share with him the responsibilities of the case. On our arrival at the house, we were informed that the fœtus had been expel-

led by spontaneous action. The midwife, who used her eyes as well as hands, assured us, that one shoulder, and so much of the other as had been left, were born first and at the same time, and that the head and breech escaped also, together. From an examination of the child, it seemed highly probable, that the statements of the midwife were correct. As the pulling at the arm was increased, the shoulder descended more and more; and the neck of the child was stretched until the face reached the pelvis, and was compressed in the integuments between the crests of the ilia. There it remained imbeded, until our examination of it had been made. The child could not have weighed less than eight or nine pounds. The mother lived, and, as we understand, her convalescence was not protracted.

We are informed by Dr. Dewees that "spontaneous evolution" had never occurred in his practice, and yet he says, "I should therefore recommend waiting for this "spontaneous evolution" whenever turning forbade the hope of saving the child, provided the labour be not complicated by either of the accidents enumerated."

To us the lesson of Dewees is far from being satisfactory on this subject. Notice the language—"whenever turning forbade the hope of saving the child." Are we to allow the woman to suffer on, and on; not because turning is difficult or impracticable, but because the child is dead? We cannot suppose this to have been the meaning of so distinguished a practitioner, for if it became a settled doctrine, that the claims of the mother are paramount to those of the child, when both are alive, how much stronger are these claims when the latter is certainly dead.

Perhaps Dr. Dewees entertained to their full extent, the views entertained by Denman, viz: that the shoulder receded from the brim of the pelvis, and that in time the head or breech assumed its place. Suppose he did believe in this change of position and presentation, it was simply a belief in a possibility. If a case had never occurred in the practice of a man of such unlimited experience, what just ground had he to hope that one would soon be presented? Would any other man be sustained in waiting thus, as a compliment to the doctrine of Denman? While we admit, with both these distinguished teachers, that "meddlesome midwifery is bad," we greatly fear that tardy action has been followed by a large amount of evil.

Diagnosis.—At an early period of labor, the signs of shoulder presentation are somewhat negative. The membranes may be felt with-

in the os uteri, but even when relaxed and admitting considerable pressure, the finger can detect nothing beyond. By and by, the os undergoing gradual expansion, the membranes protrude into the vagina. Our suspicions of a mal-presentation are increased, for instead of feeling a broad surface of membranes, and through them a large, round, unresisting body, they are in the shape of a loose, elongated bag. At length, the os-tincæ is fully dilated, but the presentation is no less obscure. Up to the present period, however, all this may frequently be said of the breech presentations, and occasionally those of the head.

The contractions of the uterus occasion a descent of the presentation, until it can be felt at the superior strait. Now the mind is led to ask and answer questions. Is this the vertex? No. It is not hard enough, it has not sufficient circumference, nor has it sutures nor fontanels. Is it the breech? No. There is a something that feels like the tuberosity of the ischium; there is no fissure, there are no genital organs. Is it a foot? No. There are no short toes—no malleoli; there is no heel. It cannot be the hand, for it is without long fingers, and there is absence of wrist, or well defined palm. Is it not the face? If it is, there is neither chin, mouth, nose, eyes, forehead. We will not say anything about the elbow, for if that be near, the shoulder cannot be far off. It must be the shoulder. The shape and size would so indicate—extending the finger upwards, either towards the pubis or sacrum, the axilla may be felt; on one side the clavicle is detected, on the other, the scapula, and during the exploration the ribs and intercostal spaces will assist in the diagnosis.

These several parts are indistinct while the membranes remain unruptured. After their rupture, the presentation descends and is more readily made out. At this time, also, the arm may be moved, which will strengthen our opinion still more. When the arm falls into the vagina, as it may by sudden rupture of the membranes under uterine contraction, or during an examination, there should not be left upon the mind a single doubt. It is true, the arm has been mistaken for a leg, and great mischief has been the result, but a careful examination of the hand will prevent errors of judgment on this point.

Great care has been enjoined upon us in our examination, least the arm should be made to descend into the vagina, and prove an obstacle to successful turning. We regard it so little in the way and so much under our control, that we have not hesitated in a case of doubtful presentation, to draw it down from the superior strait, and use it as a means of more certain diagnosis.

Causes.—Any attempt at a solution of the cause of shoulder presentation would result in a mere waste of time. At best we could arrive at nothing but conjecture, and our object in writing this paper is to present our views in as practical a form as possible. We may venture in passing, however, a few suggestions.

Among the several conditions to which shoulder presentations have been attributed, are the small size of the fœtus, a large accumulation of amniotic fluid, uterine obliquities, pelvic obliquity, long continued agitation of the body, sudden shocks, violent mental emotion, partial contraction of the uterine fibres. Most of these so called causes are daily witnessed, and yet how rare are shoulder presentations.

At this point, we are inclined to adopt the language of Cazeaux, which is—"If we might be permitted to hazard an opinion, after so many others, we should unhesitatingly say, they have erred by seeking only in the fœtus, its form and structure, for the causes of those various positions, exhibited by it in the internal cavity." To engage earnestly in an examination respecting the cause of position of the fœtus, we should deem it necessary to embrace, both the uterus and its contents.

When the ovum enters the uterine cavity, it is liable to be moulded to the shape of the cavity, (speaking mechanically) rather than to expand the uterus. From this moment, (if not before) the prominent functions of the uterus are those of growth and developement; the fundus, and that portion of the body nearest to it, remaining, as in the unimpregnated state, larger than the neck, and inferior portion of the body. This is not to be attributed to a natural tendency in the uterus to uniform expansion only, but to the fact, that the placenta is in the upper portion of the cavity, and demands that the cavity should be here more expanded, than where its contents are less.

The embryo is, at the same time, becoming more and more developed. During the first few weeks it is suspended in the liquor amnii by means of the umbilical chord. At this period, the cephalic extremity being heavier than the pelvic, (however much we may agree with M. Dubois when the *foetus* has become fully developed,) is most dependant, and until it reaches the bottom of the membranes, is subject to the laws of gravity. Afterwards, the uterus will be found to have adapted itself, in all its diameters, to those of the *foetus*, which the *embryo* has now become.

We see then, how the vertex becomes *naturally* the presentation, and it is easy to admit that Madame Boivin had 19,810 vertex, out of 20,517 presentations, that Madame Lachapelle observed the same 14, 677 times, in 15,652 cases, that Dr. Jos. Clarke had 10,387 cases, and out of this number 9,746 with the head in advance, and that Dr. Collin's record is correct in giving 15,912 head presentations, in 16,414 labors.

Vertex presentations therefore, may be justly considered as in accordence with a general law, and all others as violations of this law, just as placenta previa is a departure from the physiological principle, that the placenta shall be attached near the uterine extremity of the fallopian tube, and just as utero-gestation is sometimes earlier, sometimes later, than the natural period of 280 days.

In shoulder, and in breech presentations, the transvere, is often so much longer than the vertical diameter of the uterus, that it is visible, and gives rise to the exclamation, in respect to the woman, what a singular and ugly shape she has! May not shoulder presentations be owing to an early and too rapid expansion of the neck of the uterus, giving to the foetus much room for motion, and subjecting it to influences, which in more natural cases, would have no effect in changing its position?

In considering shoulder presentations, even to a limited extent, several questions very naturally arise.

1. In what manner can a change of presentation be accomplished most easily and successfully?

2. What mode of proceeding will prove most favorable for the mother?

3. How may the life of the child be best preserved?

4. Can any mode of delivery be relied on exclusively?

Two modes of delivery, beside those to which we have already alluded, have been described by obstetrical writers, viz: *podalic version*, or turning by the feet, and *cephalic version*, or turning by the head. Strickly speaking, however, cephalic *version* is not performed, i. e. if *version* and *turning* be considered as they generally are, synonymous terms. When to expedite labor, we substitute the head for the shoulder, we simply remove one part, that the other may occupy its place And we should not allow the sudden impression of a name, to direct our minds into an improper course of proceeding, or we may say, into

an attempt to accomplish that which is impossible. Podalic version, on the contrary, is not only a change of the presenting part, for the feet, but the actual turning of the head, most of an entire circle.

We shall endeavor to answer these questions in the order presented. The first question embraces the general principles of turning, and may be considered the foundation of the whole subject before us. It would afford us much pleasure and cause for exultation, if we could refer to American authorities for full and correct views upon turning, connected with shoulder presentations. For a moment, however, we must bring them before us.

In "Dewees' Midwifery" we find no instructions upon the management of shoulder presentation by cephalic version.

After giving a short quotation from one of the early authors, Prof. Meigs remarks, "It may be that those old practitioners of the days of Queen Elizabeth may have sometimes succeeded by pushing up the presenting shoulder, in getting the head at last to come to the strait again, but such an event appears to me in any case most improbable."

Professor Huston, in a note, to be found in "Churchill's System of Midwifery," says: "The practitioner will experience great difficulty, and most likely fail in attempting to bring down the head in a favorable position when the shoulder presents. I am satisfied from considerable experience that when the arm, shoulder, breast, back or side is the presenting part, it is better to bring down the feet at once, while the condition of the uterus is favorable for turning, than to waste time in attempting to restore the head."

Professor Bedford, who had been induced to translate and edit "Dr. Chailly's Treatise on Midwifery," is silent upon the subject of cephalic version in shoulder presentations.

Professor Miller uses the following language: "Cephalic version has but few advocates at the present day, and is confessedly applicable to such a limited number of cases that it is scarcely worthy of our formal consideration. For this reason, and because I have no experience of it, I shall confine my observations to pelvic version. Again, it is manifest that all attempts forcibly to pass the hand between a powerfully contracted uterus, and the fœtus, must be extremely painful and may cause fatal rupture of the organ. The only resort is mutilation of the child, either by eviscerating its trunk, to enable the operator to

extract it doubled upon itself, in imitation of the natural process of duplication, or by decapitating it in order that the body and head may be separately extracted."

We hope to satisfy those who may follow us to the end of our paper, that evisceration is not the sad alternative to which we must resort, in those cases in which podalic version is impracticable. Some attention, however, must be given to those European authors, whose opinions and teachings are now before us.

To facilitate turning by the feet, Dr. Churchill recommends the use of the lancet, tart antimony, and opium. He then adds, "should these measures fail, and version be impracticable, we must open the chest of the child, and eviscerate, after which it may be extracted by the crotchet."

Three modes of turning are given by Dr. Ramsbotham, viz., by the feet, the breech and the head. In transverse presentations, he claims "of these three modes, that of raising the shoulder and bringing down the head would be the safest for the child, because there would then be little chance of pressure on the funis umbilicalis, and it is that pressure which usually destroys the foetus, when extracted by the breech or the feet, but although safest for the child, it is the most dangerous to the mother, as well as most difficult to the operator, and the danger, as might be expected, is in proportion to the difficulty." "And in these attempts," speaking of the several steps in turning, "which will most likely require to be repeated, both the *uterus* and *vagina* would be seriously endangered."

If Ramsbotham expressed these views from experience, his manipulations must have been singularly defective. How a change of presentation from the shoulder to the head, accomplished as it can be, by a force scarcely appreciated by the patient, is to endanger both the uterus and vagina, is to my mind past comprehension.

The opinions of Velpeau are expressed in these words. "Cephalic version may therefore be attempted. 1st. In a well formed pelvis, where no other accident has happened except a viscious position of the foetus, and the head is found in an inclined position in the vicinity of the strait. 2nd. In presentations of the shoulder, back or anterior part of the thorax, *provided the arm is not prolapsed*, and the uterus not too much contracted. Lastly, it seems prudent to try it whenever the feet are further removed from the strait than the head is, and where it is probable the labor would terminate spontaneously if the head were

at the strait." These views refer to the method adopted by the early obstetrical writers, of performing cephalic version by manipulations, in part, through the walls of the abdomen.

Speaking of the same kind of cephalic version, Chailly admits "that the delivery will be as happy for the infant and mother as if the vertex had originally presented." "After the rupture of the membranes," he continues, "we must not think of *cephalic version*; pelvic version is the only resource." Again, "after the rupture of the membranes, this operation should be resorted to only *when the pelvis is deformed.*"

A few words in passing as a commentary on the above paragraph. If a change of presentation is safer for mother and child before the membranes are ruptured, why not afterwards? provided undue violence be not employed in effecting the changes. *Violence* would be as likely to destroy the child, as well in podalic as in cephalic version. And if the latter can be performed easily and advantageously when the pelvis is contracted, how can we reason against it, when no obstacle interposes to the ready use of the hand in changing the presenting portion of the foetus?

We have thus given a hasty outline of the views entertained by a few obstetrical writers on the subject of turning in shoulder presentation. How far our own experience, which will now be given, is in accordance with the above, others are at liberty to determine.

Some years since, we had under our care, at different periods, two cases of shoulder presentation. In one of these cases, the membranes gave way under the action of the uterus, before the os-tincae was fully dilated. As the liquor amnii escaped, the shoulder descended so as to be easily felt. Being in the country, and too far to obtain medical advise within a safe period, we determined upon speedy delivery by the feet. The os-tincae soon beeame sufficiently dilated to admit the necessary manipulations, and while passing my hand above the superior strait, the shoulder moved upwards, as if to change its location. A young man, with little experience in turning, but with sufficient knowledge of its difficulties to occasion a dread of its necessity, can appreciate the feelings of the moment, and how willingly the suggestions of nature were adopted. The movements of the fœtus were facilitated, by acting first upon the shoulder, then upon the head; and after the latter had been properly adjusted, and had become fairly engaged in the superior strait, the labor progressed and terminated favorably without further interference.

In the second case, the os-uteri became gradually expanded to its full size, with the membranes uninjured. Pressure upon them with a view to reach the obscure presentation, and a strong contraction of the uterus at the moment, occasioned their rupture. Speedily the shoulder came to the superior strait, and being easily moved as in the above case, was similarly managed.

In both these cases cephalic version was more expeditiously performed, than in the most favorable cases of turning by the feet, that had fallen under our notice. Recently a case occured in our own practice, but as it resembles so closely the above, it is not deemed necessary to enter into particulars. Cases reported by others, will doubtless be received as more conclusive testimony.

In the February No. of the Western Lancet, 1851, Dr. B. F. Richardson reports as follows :

"I was called to see Mrs. S— at 8 o'clock A. M., July 9. 1850, aged 25 years, medium height, robust and compactly built. Upon inquiry of the midwife, (who had been in attendance from an early hour in the night previous) I ascertained that she had been in hard labor during the night, and that the membranes had ruptured seven hours prior to my arrival. Her pains being very strong, with brief intervals, I at once resorted to an examination. I found the right arm in the vagina, with the palm of the hand presenting towards the inner side of the left thigh of the mother. In the upper portion of the vagina were several folds of the funis, in which I detected strong and distinct pulsations. After having remained with the patient about half an hour, observing during each pain, whether the child advanced or changed position, (neither of which occurred) I determined on an exploration, in order to determine the practicability of bringing down the feet. After placing the patient in a convenient position, I slowly passed my right hand into the uterus. As soon as my hand reached the axilla of the child, it encountered considerable constriction from the uterus. After exploring for the neck and head, I directed my hand in search of the feet—passing it up, with the palm applied to the right side of the child, until it reached the ilium ; beyond this point my hand would not pass, with the degree of force employed, which was sufficiently great to be compatable with safety and advantage. The uterus had firmly and persistantly contracted around the pelvis, and over the crest of the ilium. I retained my hand for some time in

its position, hoping to be able to insinuate my fingers beyond this point of constriction, and gain the feet, but was compelled to desist and withdraw my hand, and give over the attempt. My exploration discovered the position of the child to be as follows: its right side presented towards the left iliac fossa—inclining somewhat towards the sacrum. The right side of its neck was projected against the pubic arch, near its junction with the right ilium, the head occupying the right iliac fossa anteriorly. In this position it seemed to be firmly and persistantly maintained. The impossibility of the expulsion of the child (it being evidently above the medium size), without decided manual interference, the great risk to the mother from an attempt to turn, so long after rupture of the membranes, with the firm and constant constriction of the uterus about the child, induced me at once to propose the advise and co-operation of another Physician. By agreement, Poof. M. B. Wright was sent for, it then being between nine and ten o'clock. Expecting some delay, (on account of the numerous engagements of Physicians, generally, at that time), I left the patient for the purpose of visiting some cases of cholera; with the understanding that word should be left at my residence, when it would suit Dr. Wright's earliest convenience te meet me in the case. Unexpectedly to me the attendance of Dr. Wright was secured immediately —a contingency provided for, however, by my request, that should e return with the messenger, and before my return, to accompany my partner, Dr. Morgan, and do in the case as they thought best for the safety of the parties concerned. Being absent about one hour and a half attending to prior professional engagements, I returned by the house of the patient, and was informed that Drs. Wright and Morgan had been there about half an hour before, and that Dr. Wright had interposed in the case, being in too great haste to await the uncertain period of my return. I at once made an examination, and found the arm returned and the vertex presenting. The funis was prolapsed, but without pulsation. Observing the progress of the head during three or four pains, I found it disposed to descend, and only delayed by the resistance of the parietal protuberances. I then ordered *secale cornutum* in twenty-five grain doses every twenty minutes (as she seemed very much exhausted, and the pains inefficient) of which she took two portions. The pains became more energetic, and in about one hour from the time of taking the first dose, the child was expelled —lifeless. I judged its weight to be about nine or nine and a half

pounds. A careful external examination gave no clue to the probable cause of death. It had been dead but a short time prior to delivery. Mrs. S— had a rapid and uninterrupted convalescence.

Dr. Wright's mode of manipulation in the case, was as follows: The patient being on her back, across the bed (in the usual position for turning) he introduced his right hand, passed a couple of loops of the prolapsed funis around the child's arm, and then returned it—converting it into a shoulder presentation. He then grasped the shoulder and thorax, and pushed the body of the child upwards and to the left side, in consequence of which the head was brought near the axis of the pelvis. He then relinquished his hold of the body and grasped the occiput—bringing it down so as to enable the head to engage."

The succeeding number of the same journal contains a case of shoulder presentation, reported by Dr. Terry. After giving an account of the first labor of his patient, and of the difficulties encountered in consequence of the small size of the pelvis, the doctor proceeds: "On the evening of October 25th., 1850, about 9 o'clock, I was requested to see the above patient, being one year three months and eight days from the time of her previous delivery, to attend her in her second accouchment. I learned that she had been afflicted with erratic pains for the past twenty-four hours, which at times were quite intense. I found her in bed lying on her back, the position she felt most disposed to retain, it affording her most rest, and enabling her to endure her pains the better. I made an examination in the position I found her. The os-tincæ was dilated about two inches in diameter, readily yielding to pressure. The amniotic fluid was escaping in moderate quantities, showing evidently the rupture of the membranes. I was convinced at once it was not a normal presentation. After waiting three or four hours, the pains becoming more intense, I made another investigation, and found a shoulder presentation. I now made up my mind that turning must be resorted to—the sooner the better. At this time she had full pulse, flushed face, and spasmodic contraction in the body of the uterus. I resorted to bleeding, when the intensity of the pains ceased. After waiting a short time, I proceeded to the process of turning. I gradually and easily passed my right hand into the uterus, and with little difficulty found the right foot, and brought it down so that the toes were near the vulva. At this point I found a resistance to any further progress in that way. I then made search for the other foot, but did not find it. During this effort, the right

hand of the fœtus came down, and on withdrawing my hand, the funis prolapsed. I now attached a strong fillet to the ancle, after which I passed my left hand into the uterus. I attempted to raise the child up from its present position, but failed, the head lying in the right iliac fossa. At this time the pains had ceased, except when roused by external force. The patient, myself, and attendants were much exhausted, from the severe labor and time devoted to effect delivery. After an interval of a few hours, I obtained the able assistance of Professor M. B. Wright. On our arrival the pains had returned, but they were not severe. Upon an examination, he found the fœtus presenting with the right hand, leg and funis in the cavity of the pelvis, as before described. He attempted to turn by elevating the shoulder and making traction upon the leg, which he found already down. Failing in this, he endeavored to introduce his hand into the uterus with a view to obtain control of both feet, but the uterus had contracted so thoroughly upon the child as to render it impracticable. The doctor then decided upon a resort to version by the head. The leg, arm, and funis were successively returned into the cavity of the uterus, and the vertex was brought into the superior strait, with the posterior fontanelle behind the left acetabulum. The patient had been previously put under the influence of chloroform. Uterine contractions having ceased, it was deemed advisable to use the forceps, which were adjusted before the hand of the operator had been withdrawn from the pelvis. It was soon found, however, that the instrument could not overcome another prominent obstacle to delivery, viz., a disproportion between the head of the fœtus and the brim of the pelvis. The perforator was then used, the forceps still retaining their hold. As soon as the cranium was lessened in size sufficient to pass the superior strait, it was brought forward, and delivery was accomplished by means of the forceps."

In the May number of the Western Lancet, 1851, a case is thus given by Dr. J. P. Walker:

"I was called Saturday noon, April 12, 1850, to see Mrs. L———, aged 30, in labor with her third child. The membranes had been ruptured on Friday morning, nearly thirty-six hours previous to the time I was called.

"I found her with severe pains, but on examination could not reach the os-uteri. At eight in the evening, I could with difficulty reach the presenting portion. The meconium had been passing freely, add I had

been led to expect a breech presentation, but upon close examination I found that the shoulder presented. I sent at once for the assistance of Professor M. B. Wright, who arrived at eleven o'clock Saturday evening."

At this time the arm was suspended from near the centre of the superior strait, the fore arm being partially flexed, and looking towards the left. Dr. Wright proposed *cephalic version*, as an easy and successful mode of treating the case, which was acceded to. The fore arm, which could be moved easily by the finger, was extended, and the hand escaped through the os-externum, with the back of it anteriorly, and the thumb directed to the right thigh. The arm was brought down with a view to a more satisfactory diagnosis, and to indicate the proper manipulations for delivery. The presentation, and the hand to be used in changing it, being determined, the Dr. proceeded to the accomplishment of his object. The patient was placed, as in the ordinary way of turning by the feet. The arm which was now in the vagina, was returned so as to ascertain the relative position of the head. It was on the right side of the pelvis, the occiput in front, the face resting on the posterior surface of the right iliac fossa, and the right cheek against the promontory of the sacrum. The position of the fœtus being thus accurately ascertained, *cephalic version* was commenced.

The body of the fœtus was moved laterally and upwards, by slight force applied to the presenting shoulder, until the breech had ascended to the fundus of the uterus. The face, by this movement was made the presenting portion. It was readily changed for the vertex, but this change could not be secured without the constant application of the finger to the occiput. This was not deemed advisable, as the expulsive efforts had not yet commenced, and the os-tincæ was not more than two-thirds dilated. At half past ten o'clock A. M., eight hours subsequently, the second stage of labor commenced, and when the next examination by touch was made, the face had again presented, and had partially engaged in the superior strait—the chin being directed anteriorly, and to the left. It was deemed best not to effect any change, either in presentation or position. As the face, however, passed through the superior strait, the chin inclined more and more backwards, until it was placed before the left sacro-iliac symphisis. Before reaching the inferior strait, the chin had again rotated forwards, without extrinsic aid, and finally it emerged

under the arch of the pubis. Labor was then speedily terminated, the second or expulsive stage occupying about two hours and a half. The fœtus was dead, and offensive from partial decomposition. It weighed about nine pounds.

The patient has been doing well since. This case is not only instructive as to the proper treatment of such cases, but also for the remarkable efforts of nature to assist in delivery."

Now after all this, are we not justified in declaring,

1. That at an early period in labor, and especially if called before the uterus has been deprived of its liquid contents, a shoulder may be converted into a vertex presentation more easily than turning by the feet is ordinarily performed.

2. That although the membranes may have been long ruptured, turning by the head can be accomplished with great facility.

3. That delivery by *cephalic version* may be speedily effected, after repeated and ineffectual efforts have been made to turn by the feet.

4. That *cephalic version* should receive a prominent, nay leading place, as a means of expediting delivery in shoulder presentations.

The second of the questions already proposed, is, what mode of proceeding will prove most favorable for the mother ?

In his chapter on podalic version, Churchill observes : "On the other hand its *disadvantages* are not to be overlooked. From the distance the head has to traverse, and the difficulty of seizing the feet, and of turning the child in utero, there must ever be a fearful risk of injury to the mother."

Upon an examination of the tabular views given by Lee, we find that out of seventy-one cases of shoulder presentations, in which turning by the feet was resorted to, "seven women died from rupture, and three from inflammation of the uterus." "Laceration and inflammation of the uterus, are, therefore, the consequences chiefly to be dreaded. Four of these cases of rupture occurred in the practice of other accoucheurs, and three in patients under my own care, and where no great difficulty was experienced or force employed in turning."

In *cephalic version* the hand does not enter the cavity of the uterus, and, consequently, neither its walls, nor any portion of them, are forcibly pushed out. The fœtus is moved comparatively little within the uterus, the head being already near the superior strait ; while in *podalic* version, the part to be first delivered, is most remote from the canal through which it must pass. In the former, the injury to the mo-

ther cannot result without great awkwardness on the part of the obstetrician, while in the other we have reason to feel surprised at the escape of injury. In turning by the feet the hand must necessarily be moved considerably within the uterus, and often while it is contracting violently. In turning by the head there is but little, if any, direct contact of the hand within the uterus. In the one case, contusion of the uterus by the hand is to be expected—in the other case there is no injury, because there is no contact. Turning by the feet may occasion a severe nervous shock. Not so in changing the shoulder for the head.

How may the life of the child be best preserved? is the third enquiry to be briefly answered.

In describing the disadvantages of turning by the feet in all cases, Churchill says: "The mortality amongst the infants thus brought into the world is very great. As far as our statistics extend, they yield 174, out of 518 delivered, or 1 in 3."

The mortality in shoulder presentations is, doubtless, greater than this. In the first place the position of the fœtus weakens its hold upon life. In the second place the hand is more difficult of introduction into the uterus in shoulder than in head presentations, and whatever force is required is sensibly felt by the fœtus, and upon that part of the body where pressure is made with least impunity.

A timely resort to *cephalic* version gives to the fœtus almost as much certainty of life as if the presentation had been originally of the head. Why not? The manœuvre amounts to but little more than in rectification of deviated head positions.

We are informed by Churchill that, "Bush gave an account in 1826, of fifteen cases, in which *fourteen* were born living. In 1827, Ritgen collected forty-five successful cases. Riecke has had sixteen cases." In all the cases treated by myself from the beginning, the children were born alive. The liability to compression of the chord and consequent death of the fœtus, is in proportion to the length of the labor, or rather to the descent of the fœtus in the cavity of the pelvis. Hence to be wholly successful, cephalic version should be performed a short time before, or soon after the commencement of the second stage of labor.

Can any one mode of treating shoulder presentations be relied on exclusively? The answer must be in the negative. We are disposed to adopt the language of Cazeaux, "that at the present day it would

be improper to embrace either opinion exclusively, for some cases are better suited to the cephalic version, while there are others, on the contrary, where the pelvic one is alone practicable ; consequently both operations should be retained in practice, leaving the judgment of the accoucheur to determine the cases, where the one or the other ought to be preferred." And we will conclude this part of the subject by stating a few of the circumstances under which the different modes of turning may be adopted.

Turning by the feet is to be prefered in cases of inefficient uterine action, or in exhaustion from long continuance of labor ; in hemorrhage, convulsions or in any case in which there may be a demand for speedy delivery.

Turning by the head should be selected in all cases where difficulty arises from mal-position merely ; or in convulsions, hemorrhage, or prolapsus of the funis, if the uterus should be engaged in vigorous expulsive efforts. In rupture of the uterus our great reliance is in artificial delivery ; and the question naturally suggested would be, which will guarantee the greatest safety, podalic version, or cephalic version aided by the forceps ? And we would be guided in our action by the answer we gave to the question.

Which shoulder presents ? The diagnosis of shoulder presentations has been already given, but it is still important to ascertain which shoulder demands our attention, and the relations the fœtus sustains to the pelvis and uterus. Either shoulder may occupy the brim of the pelvis, with the back in one case looking in front of the mother, while in the other case it may be directed towards her spine. The head may be in the right, and again in the left iliac fossa, the breech occupying the opposite fossa, and the feet being high in the uterine cavity. But how are we to ascertain the actual and relative situation of all these parts ?

It has been stated that the first vertex presentation (the occiput being behind the left ascetabulum) is more frequent than all the others. If we admit that shoulder presentations are deviations from those of the vertex, it would be fair to *infer* that we were about to adjust the right shoulder with the back in front, and the head on the left of the pelvis. The direction of the axilla would indicate the opposite direction of the head, so also of the elbows. Perhaps the top of the shoulder, the neck, and even the head may be felt.

The direction of the back may be known by the scapula and vertebræ, and by the fore-arm laying upon the breast. If the coccyx, anus and iliac crests can be touched, the location of the pelvis is rendered certain.

The hand of the fœtus being in the vagina, can be used with advantage to ascertain which shoulder presents. If the palmar surface be directed upwards towards the symphisis pubis, and the thumb turns to the right side of the pelvis, we at once pronounce the right hand,* and, consequently, the right shoulder as presenting. The reverse obtains with the left shoulder.† Again, when the back of the hand appears in front, and the thumb is nearest the left thigh,‡ the arm not being twisted, we should prepare to act upon the right shoulder, the back in front and the head in the left iliac fossa.

The back of the hand in front with the thumb near the right thigh, indicates the presence of the left shoulder, the spine being in front and the head on the right side of the pelvis.

So little do we consider the presence of the arm in the vagina as an obstacle to turning, we do not hesitate to bring it down, to aid us in our diagnosis if at all doubtful.

In this country, turning is performed, the patient being on her back. In cephalic version, we have always selected this position. The hand can be more readily introduced into the uterus and the feet reached, however, with the patient on her elbows and knees, than when on the back or sides. There may be cases, in which advantage would be gained, by placing the patient in this position, preparatory to cephalic version. This is suggested, however, on the experience of only one case, which may be briefly stated.

We were called to a patient in labor, with shoulder presentation, when we learned from the medical attendants present, that the arm had descended into the vagina, full sixty hours previously. From three to five respectable Physicians had been lending their aid, each, in turn, making ineffectual efforts to bring down the feet. With the patient on her back we endeavored to pass our hand above the brim of the pelvis, but failed in this. The arm was swollen to an immense size, and as it was much in the way, it was amputated at the shoulder, the child of course being dead. Still, the hand could not be extended above the superior strait. The woman, greatly exhausted, was placed

* See figure 5. † See figure 6. ‡ See figure 7 and 8.

and supported on her elbows and knees, by asistants. With some difficulty, the uterus was then explored, the feet grasped, and delivery accomplished. When our hand came in contact with the presenting portion of the fœtus, however, we acted upon it as if to perform cephalic version, and were satisfied of our ability, thus to change the presentation. But, as labor had continued such a long time, as uterine action had, in a great measure, ceased, and as every moment of delay threatened an increase of danger to the woman, a preference was given to podalic version.

The hand to be used.—The relations of the fœtus to the pelvis having been ascertained, and the patient placed in a proper position for turning, the next question is, which hand shall be introduced into the vagina? We answer the hand, the palm of which is directed naturally towards the breech of the fœtus. It will be seen at once, that if the fœtus is to be moved in the direction of the breech, and in correspondence with the right side of the mother, and the left side of the operator, the right hand could be used with most success. In cases, in which the head occupies the right iliac fossa, a choice could be given to the left hand.

The prolapsed arm,—It is generally conceded, that in turning by the feet, it is not necessary, nor would it be advantageous, to return above the brim of the pelvis, the arm which may have fallen, or been brought into the vagina. In turning by the head, on the contrary, its reposition admits of no doubt; it is imperatively demanded. It is not demanded in consequence of any difficulty in moving the shoulder by its presence, but in the adjustment of the head at the superior strait, and its subsequent descent through the pelvis. By bending the forearm of the fœtus until the hand is directed to the upper portion of the vagina, and then pushing up the arm, the entire member will soon ascend above the brim of the pelvis, and be no longer an obstacle to complete version.

The manner of performing cephalic version.—The attention of the profession is not now directed to *cephalic version* as a new subject. It was recommended by Hippocrates; and from his days to those of Pare, was attempted in all cases in which the head did not originally present. Presentations of the breech and feet, were not associated with natural labors until a comparatively recent period.

The practice and influence of Pare led to the adoption of *podalic* version, and it has continued the reigning fashion up to the present time. Instead of changing the feet for the head, in all cases where the former presented, as recommended by Hippocrates, it is now deemed proper, following the example of Pare, to substitute the feet for the head, in many cases of difficult labor.

The spirit of progress, however, has not been idle, although it has been slow in making proselytes. Opposing doctrines have been carefully scrutenized, to a certain extent harmonized, and adapted to individual cases. Flamand, Professor at Strasburg, recalled the attention of the profession to the utility of cephalic version, and exerted his influence, by argument and illustration, to have it reinstated. Some of the German and French writers have been induced to assign cephalic version a place among obstetric operations; but they consider it applicable to such a small number of cases, that they have bestowed upon it little attention, and have attached to it but a small share of practical importance.

Although American minds are ever on the alert, and ready to test the value of suggestions from a practical source, they have not directed special attention to the subject before us. Indeed, the investigation of it has been prevented, by the expressed opposition of our writers and teachers on the one hand, and their silence on the other. And here I may be allowed to advance an opinion, which was openly entertained when a teacher myself, that the mass of the profession think and act too little for themselves. They too often embrace the doctrines of the teacher as true to the rejection of their own experience. We would say to the lecturer, independence rather than place—be a martyr for truth, rather than be false to your profession to appease local jealousy. And we would urge, that while the practitioner awards honor where it is due, he should be true to himself, by thinking and acting for himself.

A few paragraphs from Cazeaux will express the opinions generally entertained upon cephalic version by European writers.

"Flamand was also in favor of the performance of cephalic version, even after the rupture of the membranes and the discharge of the amniotic liquid. He has even gone so far as to point out the particular maneuver for each one of the distinct presentations admitted by him, for the child's anterior, posterior, and lateral planes; but we deem it useless to enter into those long details, more especially since they

may all be comprised in this: to grasp the presenting part, push it up above the strait, and then carry it as far as possible towards the side opposite to where the head is found; and afterwards get hold of the latter, and bring it down, if the efforts made by the other hand through the abdominal walls have not proved sufficient to make it descend into the excavation."

"Flamand himself acknowledges that this operation seldom succeeds, excepting when some region of the neck or upper part of the thorax presents at the strait. As for ourselves, we believe it would be difficult, even under such circumstances; however, it is barely possible, especially if there is still some water in the uterus, and the contractions are not very energetic."

"When a trunk presentation is complicated by the descent of an arm, the cephalic version, recommended by Ruffius, Rhodion, and others, should, in my estimation, be wholly rejected."

If we were to be restricted in our maneuvers by the advise given in some late obstetrical works, we should certainly fail in our object, and sooner or later we should be convinced that lessons given in the absence of experience are liable to errors, even in the outlines. Churchill tells us that "if our object be to change the presentation—for example, to substitute the head for a shoulder, we must gently push up the shoulder, and then seizing the head, bring it down to the brim, and place it in the most favorable relation to the pelvis."

A professor, representing the difficulties, nay impossibilities of performing cephalic version in shoulder presentations, places the leather baby in the manikin, raises the shoulder in a line coresponding with the axis of the pelvis, and with an air of triumph asks, "now, if I withdraw my pressure, or if the uterus should contract, will not the shoulder return to its original position?"

In reply to the above let us merely observe, that the expressions *"raising the shoulder"* and *"grasping the head,"* convey a very imperfect idea of the maneuver constituting cephalic version. And, to shorten discussion, we will present our own mode of proceeding.

Suppose the patient to have been placed upon her back, across the bed, and with her hips near its edge—the presentation to be the right shoulder, with the head in the left iliac fossa—the right hand to have been introduced into the vagina, and the arm, if prolapsed, having been placed, as near as may be, in its original position across the breast. We now apply our fingers upon the top of a shoulder, and

our thumb in the opposite axilla, or on such part as will give us command of the chest, and enable us to apply a degree of lateral force. Our left hand is also applied to the abdomen of the patient, over the breech of the foetus. Lateral pressure is made upon the shoulders in such a way as to give to the body of the foetus a curvilinear movement. At the same time, the left hand, applied as above, makes pressure so as to dislodge the breech, as it were, and move it towards the center of the uterine cavity. The body is thus made to assume its original bent position, the points of contact with the uterus are loosened, and perhaps diminished, and the force of adhesion is in a good degree overcome. Without any direct action upon the head it gradually approaches the superior strait, falls into the opening, and will, in all probability, adjust itself as a favorable vertex presentation. If not, the head may be acted upon as in deviated positions of the vertex, or it may be grasped, brought into the strait, and placed in correspondence with one of the oblique diameters.

It will be observed, that we do not act upon the shoulders by raising them. Perhaps a slight elevation would facilitate the movement already described—or it might be better to depress them—and, again, by lateral pressure, without either elevation or depression, our object might be accomplished. *Pushing up the shoulders*, therefore, does not constitute a prominent part of turning, if by pushing up is meant the mere raising of the shoulders above the brim of the pelvis.

As the body of the foetus makes its curved movement under the hand of the operator, it advances upward, as well as laterally, by a combined rather than a single action, which would give it only one direction.

The back of the hand, with which we have been acting upon the shoulder, is toward the head of the foetus—consequently, its hold upon the head would be apparently slight—yet, after the shoulders have reached the iliac fossa, the vertex may fall upon the palm of the hand in occupying the strait, and its adjustment become easy. If, however, there should seem to be a necessity for grasping the occiput, there could be no reasonable objection to a speedy change of hands.

The entire process of cephalic version is to be adopted in the absence of uterine contraction; or, rather, during the intervals of expulsive force. And, as it is now a vertex presentation, we must be governed, as to the time and manner of delivery, by those general rules applicable to such cases.

In all our cases, except the one which terminates as a face presentation, the occiput assumed a position corresponding with the first or second presentations of the vertex. In this case the occiput was before one of the sacro-iliac symphises, and to this fact we have attributed the tendency of the occiput to slide above the brim of the pelvis, and the difficulty in keeping it in place. If there had been the usual degree of uterine contraction, however, the head would, in all probability, have become fixed, and the presentation would have continued as one of the vertex, instead of changing for the face.

It will be seen that we lay no claim to the introduction of cephalic version as a mode of treating wrong presentations, and expediting delivery. A very brief examination of the subject, however, may induce some to award to us originality in respect to the means by which a successful change of presentation may be accomplished.

That cephalic version, by external manipulation—by acting upon the foetus through the parietes of the abdomen and uterus—should have few advocates is not surprising. To be successful, it confessedly requires a combination of favorable circumstances not often presented. The tissues both of the abdomen and uterus, must be thin and yielding—the liquor amnii must have been retained, and in considerable quantity—and the foetus must be proportionably small.

In all the obstetrical works we have examined, in which cephalic version is recommended by internal manœuvre, it is directed to *raise* the shoulder as the first necessary impression upon the fœtus. Viewed anatomically or mechanically, men have not been persuaded into the belief, that raising the shoulder can facilitate the permanent descent of the head into the superior strait. They claim, what is apparent to the eye in viewing a proper engraving, and as it can be demonstrated with the manikin, that the elevation of the shoulder at the brim of the pelvis, tends to increase the long diameter of the fœtus, and the transverse diameter of the uterus, and without any favorable adjustment of the head after pressure upon the shoulder has been withdrawn.

Suppose we follow out the directions given by some, and after the elevation of the shoulder, attempt to force the body of the fœtus in a lateral direction, will not the breech infringe against the walls of the uterus transversely? To enable the head to engage in the superior strait, the body must be entirely removed from it, and this can only be done by raising the breech towards the fundus of the uterus. Raising

the shoulder, therefore, is very naturally considered a means to prevent cephalic version. And we are not surprised that podalic version is almost universally adopted in the treatment of shoulder presentations.

If our mode of performing cephalic version is sufficiently clear, in the description already given, it will readily be distinguished from others. We claim for it great importance, on the ground that it is easily executed — that the mother and fœtus receive no injury — that there is little or no danger of subsequent displacement after the vertex has been fully adjusted — that, although it is most successful in recent cases, delivery may be accomplished after the membranes have been long ruptured — that it may be executed, after ineffectual efforts to bring down the feet.

By an examination of plate 3, figures 9, 10, 11, 12, the different changes which take place in the position of the fœtus, during cephalic version, from the return of the arm above the brim of the pelvis, to the first presentation of the vertex, will be observed. These sketches are not designed as faithful representations of every case of shoulder presentation and cephalic version, nor are they claimed as the exact changes which occur in any given case, but as outline illustrations of a general process.

Possibly our time might have been more profitably employed than in writing these pages. If, however, we shall have directed the minds of our brethren into a new train of observations, and aided in giving a true value to cephalic version—and, especially, if life shall thereby be preserved—we shall consider that an ample reward has been bestowed on our labor.

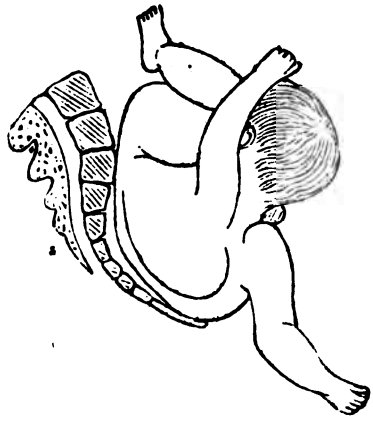

Fig. 1.

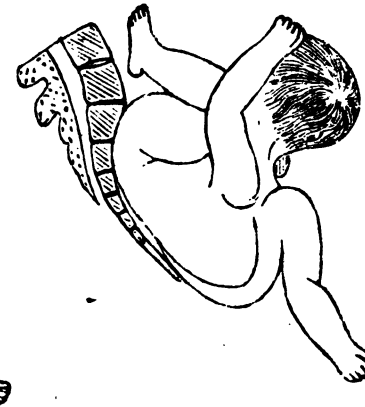

Fig. 2.

Fig. 3.

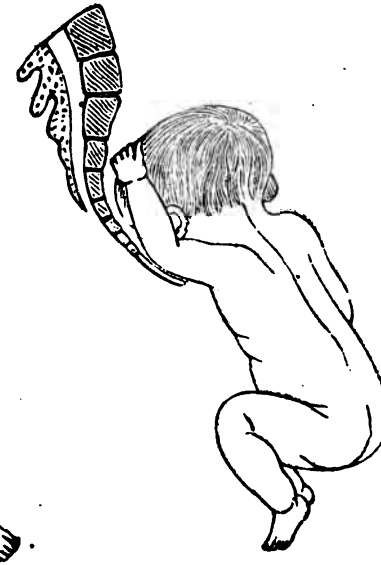

Fig. 4.

Fig. 5.

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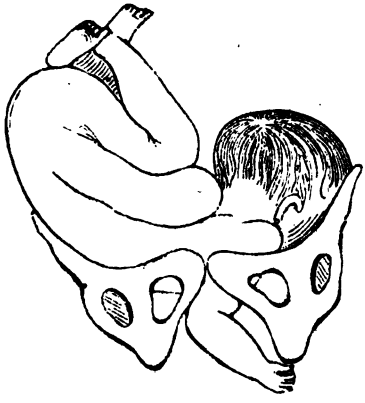


Fig. 7.

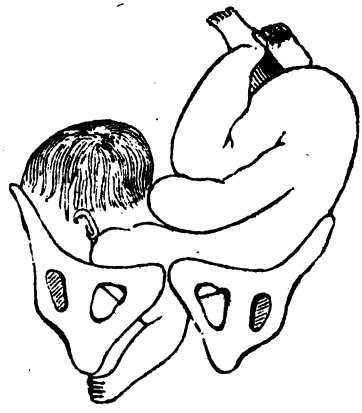


Fig. 8.

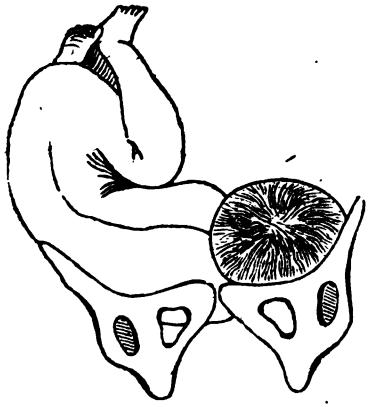


Fig. 9.

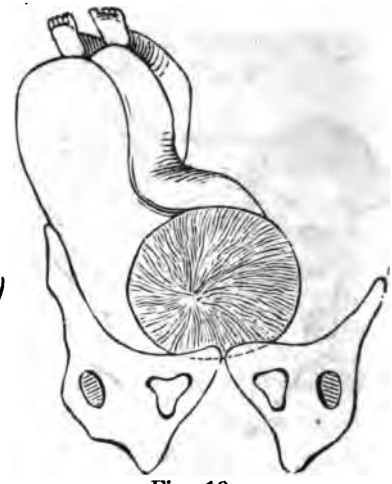


Fig. 10.

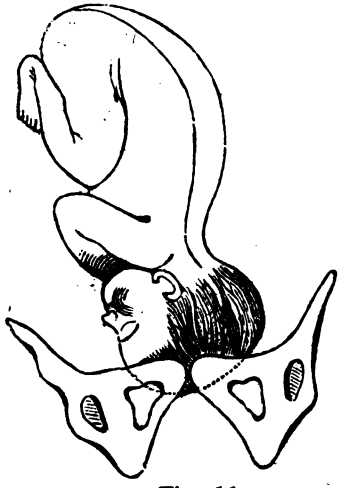


Fig. 11.

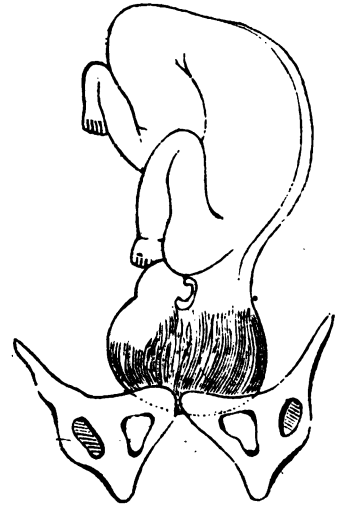


Fig. 12.

PRACTICAL OBSERVATIONS

ON THE

DIAGNOSIS OF PHTHISIS PULMONALIS.

BY L. M. LAWSON, M. D., OF CINCINNATI.

The great importance of tubercular disease of the lungs is manifest, not only from the fact that it has hitherto been the cause of a very large mortality, but it derives additional interest from the obvious increase of the disease in our latitude. My own observations have irresistibly led to the conclusion, that consumption is decidedly on the increase in the Western States; and I find, on inquiry, that this impression is confirmed by the experience of physicians generally throughout the country. It has been observed in many localities, that tubercular disease of the lungs, although formerly rare, is now becoming quite common, and these observations apply to so many districts of country, that no doubt can remain on the subject.

It is an interesting fact, also, that there is a relationship (at least in point of time,) between the increase of *typhoid fever* and consumption. I am not prepared to assert, that there exists any direct and immediate connection between the causes which produce these two affections; but it may be that their simultaneous increase is accidental or produced by different causes. But while this may be true, we cannot altogether disregard several important facts, which appear to favor the affirmative view of this question. And first, it is a pretty well established law, that there exists some degree of antagonism between *miasm* and pulmonary consumption, and that tubercular disease of the lungs is comparatively rare in paludal districts. And the same remark is true in

reference to typhoid fever. So long as our regular miasmatic fevers prevail, typhoid fever is seldom witnessed; but as the former subsides, the latter increases.

It appears evident, therefore, that in proportion as the miasmatic influence subsides, typhoid fever and pulmonary consumption increase; and the suggestion that there may be some possible connection between their causes, is somewhat strengthened by the observation, that the development of tubercle not unfrequently follows a protracted attack of typhoid fever. Louis met with such a result in a number of cases, and Dr. Copland regards consumption as one of the sequelæ of typhus. It has been alledged, also, that the product of typhus and tubercle are analagous, though of this there is no decisive evidence. It is proper to add, however, that Andral came to a different conclusion, and supposed typhus fever to be seldom followed by consumption.

But whatever may be the relationship of these affections, we know at least one important and interesting fact, namely, that they have increased in the same districts and apparently under similar influences, and that they are both kept in abeyance by miasmatic influence.

The object, however, at the present time, is not to discuss this branch of the subject, but I advert to it merely to call attention to the obvious increase of consumption, and the necessity of studying anew its early and careful diagnosis. Physicians will doubtless continue to differ as to its treatment, but all must come to a common standard in regard to diagnosis. I have thought it worth while, therefore, to present to the Society a summary of our knowledge on this subject, and to indicate, as succinctly as possible, those signs and symptoms which deserve the most confidenee, and which have stood the test of actual experience. I know of no subject in the entire range of medical observation more deserving of careful study, or more likely to lead to more satisfactory conclusions; and if I succeed in systematizing the views of a single one, or of leading one who has neglected the subject to a careful analysis of its principal features, my object will be fully attained.

The diagnosis of phthisis pulmonalis, rests on the vital or rational symptoms, and the physical signs derived from the chest in a state of disease. I need hardly remark that neither of these can be safely omitted; and he who would attempt to exclude one of the means of diagnosing the disease, except in the most completely developed cases, would but half perform his duty, and would be liable to the most grievous errors.

The vital or rational signs of consumption are by no means obscure or unimportant, but in a large number of cases they are not sufficiently clear and decisive to render a diagnosis positive and certain; and although they are quite sufficient to give rise to a grave suspicion as to the existence of disease, yet we usually require the aid of more certain and positive tests.

Among the *general* signs of phthisis, one of the most important, constant and distinctive, is, *loss of weight*. It is probable, indeed, that no case of consumption can exist without an obvious loss of weight; and when we remember that the deposition of tubercles is preceded by the existence of a *diathesis*, and that the diathesis is based essentially on a *lesion of nutrition*, we will at once perceive that emaciation or loss of weight will not only become an *early* symptom of phthisis, but may even *precede* the local deposit of tubercles. It is certainly true that loss of weight is one of the most constant symptoms of the first stage of phthisis; and, I am inclined to think, is always present.

Numerous observations were made on this subject by Dr. Hutchinson, of London, the result of which may be thus stated: In 2976 healthy males, he found the average weight to be 155 pounds; while in 710 cases of tubercular disease, it was reduced to 111 pounds in males, and 104 in females. This reduction is striking and obvious, and doubtless conforms to a uniform law of the disease. The same observer remarks, also, that he never found evidence of phthisis when the weight was undiminished. This statement accords with my own observations; and in any case in which the weight remains undiminished, I feel at once confident that the disease is not consumption.

In this process of emaciation, it is to be remarked, that it does not consist alone in the diminution of adipose material, but that the parenchyma of organs is likewise attacked. Louis and Bizot observed that the weight of the heart, and caliber of the aorta suffered material reduction; and the same observation will apply to other organs. It has been observed, however, that the emaciation is not rigidly uniform, but that it undergoes many fluctuations; and rises and falls within given limits, although the general tendency is certainly and evidently downwards. It is stated by Dr. Walshe, that the late Dr. Robert Williams inferred from a large number of observations, that these rises and falls of weight were regulated by a law of periodicity; but it is not known what period was assigned to these changes. Dr. Walshe is of opinion

that it falls within a month — the period assigned by Sanctorius to the variations which take place in health.

But, notwithstanding the value and importance of this symptom, it will at once be perceived that, although it is a constant attendant on phthisis, yet it is equally an accompaniment of other affections, and therefore is not sufficient alone to become the basis of a diagnosis. Its absence is more positive than its presence. Nor will the co-existence of cough, febrile excitement, or the evidence of a hereditary predisposition, do more than increase the *suspicion* that the loss of weight depends on the presence of tubercles. We must, therefore, look further, and call to our aid those well known physical signs, which, with so much certainty, announce changes in the density, movements, and breath-sounds of the lungs.

Phthisis is properly divided into three stages. 1. Stage of crude tubercles. 2. Stage of softening. 3. Stage of excavation. The signs accompanying these several changes are quite characteristic, and require to be considered separately.

First Stage.—The signs indicating the existence of crude tubercles embrace the following division. 1. The contour of the chest. 2. Its movement. 3. The results of percussion. 4. Abnormal breathing sounds.

1. *Contour of the Chest.*—In regard to the contour and development of the chest, there is no common conformation necessarily or even generally associated with consumption. Some importance is usually attached to the existence of a flat, narrow, or otherwise ill-developed chest; but the only deviation from a perfect contour, which has been observed to bear any relation to the tuberculous constitution, is the *narrow* chest. In this condition, the imperfect development exists at the summit, and consists of a deficiency of lateral expansion, which reduces the transverse diameter below the antero-posterior — the vertical diameter being, at the same time, increased. The truly tuberculous chest, therefore, is flattened laterally, and elongated. It must not be inferred, however, that these deviations from a perfectly normal type are constantly present in the tuberculous constitution, nor that they are to be received as infallible signs of the disease, when they do exist. It requires, indeed, a very strongly marked and fully developed tuberculous diathesis to so far impress the osseous system as to destroy the symmetry of the chest; and, in a large proportion of cases, where the constitution is impressed but slightly during the period

of growth, no deviation from the healthy type can be detected. And it is to be observed, also, that according to the investigations of Moillez and others, that a perfectly regularly formed chest is met with only in about one in five persons, so that we cannot safely predicate the results of a case on any particular conformation. It is a common observation, that persons with the best formed and most capacious chests are scarcely less liable to consumption, where the diathesis exists, than those of the opposite conformation. This opinion is singularly illustrated by the case of Freeman, the noted prize-fighter. This person went to England in 1842, for the purpose of exercising his *profession;* and, while in his best condition, was examined by Dr. Hutchinson, who found his height to be 6 feet 11½ inches, and the vital capacity of his lungs reached the enormous volume of 434 cubic inches. And yet this man, with one of the most capacious chests on record, died of consumption at the end of four years.

When, however, actual disease occurs — that is when tubercular deposits take place — then the general form of the chest changes from the healthy type, and manifests a somewhat uniform morbid contour. In this state of organic disease, the back becomes rounded and stooping, the points of the shoulders are directed inwards and forwards, and the apex of the chest contracts. But these changes involve the shape of the chest in a general manner: there are others, however, more local and pathagnomonic of tubercular deposit, and it is to these that our attention must be especially directed.

When tubercular matter is deposited in the lungs, there is usually *flattening or contraction below the clavicles.* In a few instances, (perhaps one or two in a hundred,) some degree of infra-clavicular *bulging* will take place; but when this slight prominence does occur, it is not to be attributed to distension from tuberculous deposits, but depends on accompanying *emphysema.* Bulging, therefore, is never associated with dullness.

The ordinary change of form, and that which possesses most interest to the practitioner, is *flattening or contraction.* In the very earliest stage, however, and when the tubercular deposits are small in quantity, the lung-tissue is not sufficiently impaired to cause any obvious degree of flattening; but when the morbid substance increases in quantity, a portion of the air-cells and minute tubes collapse, and the walls of the chest follow the receding lung. In some examples the flattening

depends on contraction of exudation—matter in the pulmonary parenchyma, or plastic effusion from pleurisy.

The means of recognizing the depression are simple inspection and measurement. When the depression is slight, the eye is not sufficiently accurate to be a positive guide, and it becomes necessary to resort to admeasurement. The most convenient instrument for this purpose is the *callipers*. This instrument consists of two curved blades, and a graduated arc, which will indicate, with the most infallible certainty, the slightest deviation from symmetry of the two sides. The extremity of one blade is placed under the middle of the clavicle, and the other on the spine of the scapula, at a point corresponding with the first blade. A deviation of a sixth of an inch may usually be regarded as the result of morbid action. Flattening, however, does not occur, in an appreciable degree, at an early period, in more than perhaps one in six or seven cases. The law may be thus stated: Of 100 cases, 15 will manifest contraction, 2 bulging, 83 remain unchanged. This statement, although it may be found to vary, will serve as a useful practical memorandum.

Movements of the Chest.—At an early period, and when no depression exists, the movements of the chest remain unaltered, but as the disease advances, *and always when contraction is present*, the expansion becomes impaired. In a natural state, the chest gradually expands from below upwards, the shoulders are slowly elevated, and three or four upper ribs, by regular expansion, arch or bulge outwards.

The physiological expansion, from full inspiration to complete expiration, may be stated at from three to three and a half inches. But the deposit of tubercles limits the expansive movements, and the extreme range will not exceed one and a half or two inches. The infra-clavicular region is the point where movements are most obviously diminished, which may be detected by inspection or measurement. When defective movement exists, instead of the gradual expansion from below upwards, and the regular arching outwards of the upper ribs, the movement has more the aspect of simple elevation, as though the walls of the chest were composed of a solid case. If inspected with the eye, the movement should be observed from behind the patient, as well as in front, and the hands may be placed over the clavicles, which will at once detect the *elevation* instead of *arching* movement. When, however, the eye is insufficient to determine the change, various chest-measurers have been devised to detect the

slightest variations. The common tape measure is adapted only to the entire circumference, but the chest-measurers are applicable to circumscribed parts. One of the most convenient and accurate of these instruments is *Onaius' Stethometer.* The instrument is fixed at a given point, say on the sternum, and the cord is carried around to the spine. The examination of the two sides will reveal the deficiency of expansion of one, and the index will point to the slightest difference. The perpendicular movement can be measured by inserting the stem of the instrument, and making a fixed point for the cord.

It is important to remark, that whether we examine the movements with the eye or by admeasurement, our observations should be made not only during tranquil respiration, but also *with forced inspirations;* indeed, it is during the latter movement that the most marked changes can be noticed. I will observe, also, that the clavicular expansion being greatest in females, the sign is peculiarly valuable in that class of patients.

But there is another means of detecting diminished expansion, which has gained some notoriety, but which has not been much employed in this country. I refer to Dr. Hutchinson's *Spirometer.* This instrument is designed to indicate two conditions, 1st, The permeability of the lungs; and 2d, The mobility of the walls of the chest. It is to determine, therefore, the quantity of air which an individual is capable of respiring; and, in order to render it applicable to morbid conditions, it is necessary to have some rule by which to judge of each person's normal capacity. This law, Dr. Hutchinson declares, is based on the height of the person, without reference to the size of the chest. The law is thus stated: "That in the erect position, for each inch of stature from 5 to 6 feet, eight additional cubic inches of air, at 60 F., are given out in one volume, by the deepest expiration, immediately following the deepest inspiration. The thoracic mobility, therefore, increases and decreases with the height according to an arithmetical progression." Thus a man 5 feet 7 inches, can breathe 222 cubic inches of air, while one 5 feet 6 inches will breathe 8 cubic inches more, and one 5 feet 6 inches, 8 less, and so on, in all proportions. These results are modified by age and weight; but between 15 and 55 years, and up to 166 pounds weight, no important deviation will occur.

The mobility of the chest, as well as the permeability of the lungs becoming impaired during phthisis, the spirometer is intended to indi-

cate the extent of these changes. It is necessary, therefore, to determine the extreme limits of healthy respiration, for it must be admitted that considerable variations will occur. After numerous experiments, Dr. Hutchinson has reached the conclusion, that 16 per cent. less than the natural capacity will represent the lowest limit of healthy respiration, and that a greater reduction should always be regarded as presumptive evidence of tubercular deposits.

But, in phthisis it is found that the breathing power falls very much *below* 16 per cent. Thus, in the first stage of the disease it is usually reduced 33 per cent., and, in the second stage, 53 per cent. If, therefore, we find a reduction of *one-third*, that is, from 70 to 80 cubic inches for a person of medium stature, it is quite certain that some difficulty exists in the lungs, and that the case demands careful examination.

The spirometer, according to my experience. is a valuable, though not rigidly exact instrument; and, as its indications do not point positively to tuberculous disease, but may result from any other obstruction, it requires an accurate knowledge of the whole subject, and much careful discrimination, to fully appreciate and correctly interpret its results. In the hands of an experienced auscultator, it will prove exceedingly satisfactory; and even the inexperienced will receive considerable aid from its use.

Another simple method of testing the capacity of the lungs, consists in ascertaining the length of time a patient can *count* after a full inspiration. Thus, the patient makes a full inspiration, and then counts *aloud*, without again inhaling, until the lungs are exhausted. Persons in health will, as an average, count at least thirty-six seconds; while in the first stage of phthisis, the period will be reduced from ten to fifteen seconds.

Percussion.—The principles of percussion are simple, and require but few remarks to elucidate their application to the diagnosis of phthisis. In regard to the mode, however, it may be remarked, that the fingers of the left hand make, as a general rule, the best plexi-meters, and those of the right, the most appropriate percussors. In this way we may employ one, two, or three fingers as pleximeters—one finger being sufficient for ordinary cases. But, when the tubercles are sparsely scattered through the apex of the lung, it becomes necessary to percuss over a broad surface; and, for this purpose, we should employ four fingers, firmly pressed together.

Percussion is not so simple a manipulation, however, as might be supposed, and there are some persons who never acquire much tact in that means of diagnosis. Indeed, it requires very considerable practice to become an expert percussor. Some persons who experience great difficulty in using the fingers to advantage, will do better with the hammer and ivory pleximeter. Indeed, some of the best operators prefer the hammer and pleximeter under nearly all circumstances, and I have myself frequently used them to advantage.

When these instruments are used, I prefer a modification of the Winterich hammer and of Piorry's pleximeter, which I have had constructed. The hammer is constructed with an elastic handle, and the pleximeter is sufficiently narrow to be placed on the inter-costal spaces.

As a means of diagnosis in the early stage of phthisis, percussion justly holds a high rank. A very moderate deposit of tubercles will give rise to an appreciable diminution of clearness. In proportion as the deposit increases, dullness becomes more manifest, and the walls of the chest convey to the touch a sense of resistance. In extreme cases, the dullness becomes nearly complete, and the resistance approaching to actual hardness.

The principal precautions to be observed during percussion has reference to the point where dullness is most frequently manifest, the degree of inflation of the lungs, and the possible co-existence of emphysema. The most probable point of eliciting dullness in the early stage of phthisis, is the inner side of the clavicular regions, immediately on and above the clavicle. It is important to percuss *from* the trachea, in order to avoid the tubular sound produced by that organ. In the next place it is important (at least in all doubtful cases,) to percuss both when the lungs are distended by a full inspiration, and emptied by a forced expiration — requiring the patient to hold the breath at the close of each process until the percussion can be made. It is always well to consider, also, that there *may be* accompanying emphysema, which would render the results of percussion deceptive.

With these precautions, and when properly performed, percussion furnishes important signs, denoting the existence of the first stage of phthisis.

Vocal vibration is insignificant in the early stage, and unless the deposit be very great, it is not a sign of much importance. It should be remarked, however, that natural vocal fremitus is greatest on the right side, so that an excess of that sign on the left, just below or b[illegible]

clavicle, becomes a strong evidence of the existence of consolidation.

The next consideration in the diagnosis of the first stage of phthisis, embraces the signs furnished by *auscultation*. The modifications which the respiratory murmur, voice and cough undergo, constitute the most important signs of tubercular deposits, and in a large proportion of cases are definite and conclusive.

The modifications of the breath-sound are quite numerous, but the most important may be thus enumerated: Weak, jerking or irregular, harsh, bronchial, prolonged expiration — with a few others of less note. The diagnostic value of these sounds are proportioned to their limitation — that is, when limited to the apex of the lungs, they are far more significant of tubercles than when more diffused.

Weak or diminished respiratory sound is a common attendant on the first stage of tubercular deposits: it may occupy the entire apex, or be limited to particular spots, and, in its pure development, manifests no peculiarity except simple weakness. It is a law, however, of the respiratory system, that an impediment to the admission of air into one part, is counterbalanced by supplementary action in another, so that *puerile* or loud respiratory manner, is invariably and necessarily associated with the weak, when the latter results from local obstruction. And this important fact becomes the corrective of what might otherwise prove a serious error, namely, it distinguishes local obstruction from general weakness. Thus the respiratory murmur may be naturally imperfectly developed throughout the whole pulmonary structure, as a result of general weakness and imperfect expansion; but this form of weakness is never associated with supplementary or puerile respiration, and it is only when the obstruction is local and morbid that the increased murmur is heard.

If tubercular deposits are *diffused*, the weakness may occupy an entire apex, in which case the puerile or increased sound will be manifested in the opposite lung; or, the weakness may be developed in spots or patches, corresponding to the mass of tubercles, in which case the supplementary sound will also be local, and heard in the same apex, around the points of weakened sound.

The rule, then, may be thus stated: When weakness of the respiratory murmur is natural, it is general throughout the lungs, and is not associated with puerile sound; but, on the contrary, when the weakness is the result of tubercles, it is local, becomes associated with supplementary action, and gradually disappears downwards.

The next most important modification of the respiratory sound is, the *jerking* respiration. In this variety of respiratory sound, the air penetrates irregularly, or by successive jerks, as though one impediment after another was suddenly overcome, until the lungs become inflated. These puffs or jerks are, according to my observation, usually three in number, varying somewhat in intensity, but all distinct and easily recognized. There is evidently a relationship between simple weak respiration, and the jerking variety, both depending on imperfect expansion — one gradual and regular, the other irregular and intermittent. This sign is developed during inspiration, and is usually associated with some secondary changes; thus, the inspiratory murmur is apt to be slightly harsher, or, it may be feebler, than natural, and diminished in duration, while expiration is somewhat increased in duration.

It is important to observe in this connection, that jerking respiration is not, in all its forms, indicative of tubercles, but that it may arise from pleurisy, pleurodynia, general weakness, and states of nervous debility. When produced by these causes, however less circumscribed, it is developed more largely over the lungs, while, on the contrary, when it depends on tubercular deposits, it will be manifested locally, and at those points where tubercle is not prone to occur.

When jerking respiration arises from general causes, it is, I think, usually manifested by only *two* puffs. My observations on this point have been somewhat numerous, and have led to the conclusion, that it is a very general, if not universal law, that jerking respiration arising from other causes than tubercular deposits, is manifested by *two* puffs. The importance of this fact in diagnosis, will be at once perceived. I have witnessed a case of tubercular disease (miliary,) probably associated with diluted tubes, in which four puffs were distinctly audible with expiration, while inspiration remained continuous.

In addition to these distinctions, I have remarked another difference between the tubercular and non-tubercular jerking inspiration, which is, that the tubercular form is usually, perhaps invariably, characterized by *three* puffs or jerks, whereas, in the other forms, there are but *two* jerks. This distinction is of great practical importance, and may enable us to distinguish mere nervous debility from tuberculous disease. Within a few days a case was presented to me, in which the double jerk was present, but the spirometer gave the full vital capacity, and in the absence of other signs, I felt authorized to pronounce it non-tubercular.

The special value of jerking respiration is, that although not of constant occurrence, it is one of the *earliest* signs, and is manifested at a period when others may be very obscure, or altogether wanting.

Harsh respiration, diffused blowing, and bronchial respiration, often present a succession of changes from the lowest to the highest. *Harsh* respiration is louder than natural, but differs from the peurile, and conveys the idea of air passing over a rough surface — which is literally true. It is finally succeeded by diffused blowing, and bronchial respiration — signs clearly indicating the progress of tuberculization. It is well to remember that harshness, for obvious reasons, is a more conclusive sign in the male than in the female — and on the left than right side. When the sign is distinctly developed, and persistent for a length of time, and especially if associated with dullness or percussion, it may be received as a very certain indication of the existence of tubercles. Harsh respiration is first and more obviously marked in expiration, which is also prolonged, but finally becomes manifest during inspiration. And as this condition is ultimately merged into the bronchial variety, the same remarks apply to that form.

Intimately allied to these changes is *prolonged expiration*. The rhythm may be disturbed, however, by *shortening inspiration*, which happens in jerking respiration; but the most important and significant change is simple prolonged expiration. The murmur, when prolonged, is usually harsher, louder and more bronchial, according to its degree of development, The semeiological value of prolonged expiration depends on its location, and the presence or absence of the various causes, independent of phthisis, which are known to be capable of producing it; but, when limited to the ordinary seat of tubercular deposits, it becomes a sign of much value. Indeed, it is frequently among the first and most distinctive signs of incipient phthisis. If, however, the sound be not uttered in quality, (that is, harsh or loud,) its value is much diminished, if it does not become entirely insignificant; and, moreover, it must be cautiously received when heard on the right side, where it naturally exists, and in females, when it is more likely to be physiological.

It will be observed now, that a number of signs, derived from the modification of the respiratory movement, have been enumerated; but, notwithstanding they are sufficiently clear and significant, they are not of themselves sufficient to establish the existence of tubercles, and they require, therefore, certain corroborating circumstances before their

exact import can be made fixed and certain. Thus, neither contraction, diminished mobility, dullness, feeble, harsh, or bronchial respiration—nor yet jerking and prolonged expiration—can be received as positive and unconditional evidences of the presence of phthisis; for these same modifications of the respiratory sound *may* be produced by various forms of inflammation, nervous diseases, mechanical obstructions, and certain pathological changes independent of tubercle.

If, therefore, we would reach definite and safe conclusions, two additional circumstances must be taken into the account: 1, The position in which the sounds are developed; and 2, The co-existence of other signs, of an adventitious nature, but which serve to disclose the character of those which, taken singly, are indefinite.

1. *Of Position.*—In the chronic forms of phthisis, the tubercular deposits take place so nearly constantly at the apex of the lungs, that we may, with almost infallible certainty, regard these signs, occurring at that point, as evidence of that form of disease. And, moreover, tuberculous deposits are known to occur most frequently in one apex, and the left oftener than the right, in the proportion of nearly two to one. So that mere position itself will throw much light on the subject, if not render the result positively certain.

2. But let us next consider the character and semiological value of certain *adventitious sounds*, or rhonchi, indicative of this first stage of phthisis.

Of the various rhonchi associated with the first stage of phthisis, none is so well marked and characteristic—none so infallible in its import, as the *dry crackling rhonchus;* indeed, it is the only true rhonchus occurring in this stage of the disease, independent of inflammation. It consists of a greater or less number of crackling sounds, heard only during inspiration, and at the apex of the lungs, the usual site of tubercles. The sound does not convey the idea of bubbles, and hence it is called *dry crackling.* It frequently happens that only a few sounds will be heard at once, and sometimes but a single one. It is not, however, an accompaniment of the very earliest stage; on the contrary, some weeks, or even months elapse before the rhonchus is developed, when a few dry *clicks* will be heard with inspiration.

The dry crackling rhonchus is a very positive sign of tubercles; so much so, indeed, that it is not known to occur in any other affection. It indicates, however, a somewhat advanced state of the first stage, and is soon transformed into the *humid* crackling, which latter is as

certainly evidence of softening. An experienced auscultator will not hesitate, all things being equal, to found a diagnosis on a single dry click, although he will usually find, at least, two or three. In regard to the frequency of its occurrence we cannot speak quite positively. M. Fournet, however, declares that he has met with it in eight cases out of ten. According to my own observations, it is quite frequent, though I have not observed it in so large a proportion as mentioned by Fournet. Dry crackling does not usually continue longer than a few months, and often only as many weeks, until it is transformed into the humid variety.

M. Fournet introduced another sound, which he styled *pulmonary crumpling*, and is said to be represented by the rustling of tissue paper. Auscultators are divided in regard to the existence and pathological signification of this sign. M. Fournet divided it into three varieties; but others have failed to recognise them, and, indeed, the range of characteristics is too wide to admit of ready classification. One is called a creaking sound, another a plaintive cry, and a third like the crumpling of tissue-paper. Barth and Roget confess their inability, together with Andral, to appreciate these sounds; and Dr. Walshe has so little confidence in them, that he does not even mention pulmonary crumpling in his Practical Treatise. M. Fournet, on the contrary, declares that he met with it in one-eighth of all his cases; and Dr. Colton, physician to the Brompton Hospital for Consumption, recognizes the tissue-paper crumpling variety, but is of opinion that it is less frequent than maintained by Fournet.

The crumpling sound is represented as occurring in the very earliest stage, and before other signs are much developed; it is heard at the apex of the lung during inspiration, and is invariably superseded by harsh respiration, and, finally, dry crackling. A careful examination of the subject has confirmed me in the belief that pulmonary crumpling is occasionally heard, and that it is a mere modification of harsh respiration, and depends on the same mechanical cause. The fact that the crumpling is speedily merged into or superceded by harsh respiration, shows their relationship, and renders it extremely probable that they are merely stages of the same sign, depending on the same pathological condition.

The variety of occurrence and transient character of pulmonary crumpling greatly diminishes its practical value; but, when once established, may be regarded as a pretty sure indication of commencing

tubercular deposit. It is often more audible at the supra-spinous fossa than anteriorly.

Some additional evidence of consolidation may be derived from the voice — vocal resonance and bronchophony indicating, ceteris paribus, consolidation. But the natural variations in vocal resonance are so great that the value of the sign is much diminished; and inasmuch as it occurs only at an advanced period of the first stage, it is usually superceded by other and more reliable signs. It is of more value, however, on the left side, as it predominates naturally at the right apex; hence, if it be found *equal* on the two sides, the presumption is in favor of the left being morbid; and if the latter should exceed the former in loudness, it is nearly positively the result of disease.

The remaining signs refer to the heart, and consist of a free transmission to the right side, and occasional murmurs. The enlarged area, however, over which the sounds of the heart can be heard, especially the *second* sound, is not, of itself, of any special importance, and is quite frequently to be attributed to dilatation of the ventricles, instead of tubercular disease of the lungs. The systolic murmur occurs too unfrequently to become a sign of much value, but is occasionally met with, as my own experience has furnished several well marked examples.

The preceding remarks embrace the principal *physical* signs, which denote the existence of tuberculous deposits. In addition to these, there are a few constitutional symptoms which should not be neglected, although in point of clinical value they occupy a position inferior to the physical signs. These are emaciation, (already referred to,) cough, chills and febricula, or slight febrile movements, weakened digestive, nervous and secretory functions, deterioration of the blood, and diminished animal heat. These conditions vary greatly in different cases, and in their order of occurrence; but, taken in connection with the physical signs, they aid in removing doubts in obscure cases, and significantly point to the degree and progress of constitutional derangement in those of a confirmed character.

Having thus presented a brief general account of the phenomena indicative of the first stage of tuberculosis, it may be useful to restate those signs which deserve the most confidence.

1. Emaciation.
2. Persistent dry cough.
3. Infra-clavicular depression.

4. Diminished expansion.

5. Dullness on percussion.

6. Increased vocal fremitus.

7. Altered respiratory murmur — weak, jerking, harsh, bronchial, prolonged expiration.

8. Dry crackling.

The existence of these signs, or a fair proportion of them, may be regarded as positively indicative of the presence of tubercular deposits.

The preceding observations refer to ordinary crude tubercles, as they are deposited in masses; but there is another form denominated *miliary tubercles*, which present different and less distinct phenomena.

Auscultators are by no means agreed as to the signs which indicate the presence of miliary or solitary tubercles, and it is generally admitted that no fixed and distinctive phenomena exist. Dr. Skoda declares, indeed, "that there are no distinct signs by which we can with certainty diagnose the existence of acute miliary tubercles." Dr. Walshe admits the difficulty of diagnosticating miliary tubercles, but adds that the real difficulty consists in distinguishing miliary phthisis from *typhoid fever*.

My own observations on this subject have been made with much care, and I have been able, in a number of instances, to diagnosticate the existence of miliary tubercles, which, unfortunately, was confirmed by post-mortem examinations.

The characteristic signs, or those on which I chiefly rely, are persistent dry cough, quick but usually feeble pulse, with general febrile action, slight incompleteness of pulmonary crepitant or finely sub-crepitant rhonchus. Dullness is not appreciable, except in very advanced stages.

The existence of the crepitus, extending to the base of the lungs, without the accompanying signs and symptoms of either pneumonia or bronchitis, is as characteristic of acute miliary tuberculosis, as dry crackling is of tubercles in masses. The degree of the frebrile movement, (which is an exact measure of the acuteness of the disease,) will vary with different cases, but it is nearly always greater than in the ordinary forms of consumption.

It is altogether possible that there is a stage of incipiency in this variety, in which there will be neither sufficient fever, embarrassed breathing, nor altered murmur, to enable us to make a diagnosis; but,

when a little more advanced, I am satisfied that in the phenomena which I have mentioned will usually be found its concomitants.

The second and third stages of phthisis do not require any lengthened description. The second, or stage of softening, is characterized by an increase of nearly all those signs indicating the *first* stage; and super-added to which, as the characteristic sign of softening, is the moist or humid crackling rhonchus. Thus, the dry crackling met with, at an advanced period of the first stages, is simply transformed into the moist crackling. There is, indeed, a gradual transition from the dry *click* to the moist sub-crepitant, or large mucous bubbles, which at times become metallic. When first developed, the humid rhonchi are few in number, not usually exceeding the preceeding dry crackling; but as the disease advances, they become more numerous, and more obviously liquid and bubbling in character.

The *third*, or excavation stage, presents different signs according to the size of the cavity. Thus:

1. *Small* caverns are announced by the humid crackling becoming more distinct, and more resonant or metallic, which gradually increases in size and clearness until it becomes evidently cavernulous. The fully developed cavernulous ronchus is a distinct, bubbling, clear, metallic sound, more distinct during inspiration, but heard likewise with expiration. The intensity of the sound is proportioned to the size of the cavern, but it always conveys a distinct impression of being produced in a small excavation.

2. *Large Cavities.*—The signs of large cavities or vomicæ presents several new sounds, not heard in either of the preceding stages. Thus, the percussion sound, instead of being dull, may give no indication whatever of disease—or there may be nearly complete dullness. These differences depend on the size, emptiness, and approximation of the cavity to the surface. Or, percussion may, when the cavities are very loud, elicit an amphoric or tympanitic sound, and, when the patient's mouth is open, the cracked pot-sound. Cavernous respiration is also heard, but when incomplete, not readily distinguished from fully developed bronchial sound. Bronchial respiration, however, gives the idea of blowing through a dry tube, while the cavernous variety produces the impression of air passing into a hollow space, and is more or less resonant or metallic. When the cavern is large, the respiration assumes the amphoric type, which is imitated by blowing into an empty bottle. The cavernous rhonchus also exists, varying in tone according to

the size of the cavity, but always preserves its metallic character. Metallic tinkling and echo occasionally occur, but they are rare and unimportant events.

Pectoriloquy, one of the most noted modifications of vocal resonance, is, when conjoined with other signs, conclusive evidence of the existence of a cavity. But the converse is not true. Indeed, a large cavity may exist without a distinct pectoriloquy, while that phenomena may be manifested in a perfectly normal condition of the lungs. The physical conditions requisite to produce pectoriloquy are, a cavity of moderate size, empty, and near the surface. But so closely allied are the sounds of natural pectoriloquy and fully developed bronchophony to the true cavernous voice, that the sign is often deceptive; and, indeed, *whispering* pectoriloquy is really the only reliable and characteristic vocal resonance. Bronchophony bears the same relationship to pectoriloquy that bronchial does to cavernous respiration, and the same means of differential diagnosis exists in both instances. Cavernous cough, and amphoric voice also exist—the former constantly, the latter only in particular cases—but these require no special remark.

In taking a general view of the disease, without special reference to the stages, we may present the following summary of the constitutional vital symptoms:

1. *Cough.*—The characteristics of tubercular cough are, that it comes on gradually and mildly, is not preceded by corrhyza, is not usually paroxysmal in the early stages, and is either dry, or at most, produces but scanty transparent or frothy sputa. As the disease advances, the sputa gradually becomes glairy, and are marked with striæ of opaque lines, of pale yellowish color; and grows less and less areated, until it is finally opaque and purulent. Several forms of the opaque or purulent sputa are met with:

1. They appear in the form of small pellets, opaque, of a yellowish color.

2. In large masses, with an irregular or ragged outline.

3. Broad flat lumps, greenish tint, with smooth outline, remaining separate in water.

4. An ash colored sputa, destitute of air, which runs into a common mass, and may be regarded as pure pus.

2. *Hæmoptysis.*—This symptom occurs in probably two-thirds of all the cases. Dr. Walshe states the proportion at 81 per cent., but

it has appeared to me that this estimate was too large. I have seen many cases of genuine consumption, in which, according to the history, no form of hæmoptysis occurred; but some allowance must be made for patients at times failing to observe the effusion of blood when the quantity is small.

3. *Dyspnœa.*—Singular enough *dyspnœa* is not a very prominent symptom. When the patient is tranquil, respiration is usually not difficult, but may become so on exercising. Generally, however, the *frequency* of the respiratory movements is increased from four to eight to the minute, but even this is not constant, for I have observed examples in the last stage in which the movements did not exceed 18 or 20 to the minute. When the respiratory movements become accelerated, there is usually a proportional increase in the movements of the heart; but in some cases the latter becomes disproportionately accelerated. In *extreme* cases, of course, respiration may become much oppressed, even when the patient is tranquil.

4. *Fever.*—Fever occurs under two forms: One is associated with the early stages, and follows chilliness; the second, and more common, is the hectic excitement, following the process of softening of the tubercular masses. Of course I refer to ordinary phthisis, and include what may properly be called the *acute* variety. According to Louis, fever occurs in the proportion of 16 to 90.

5. *The general functions.*—Nearly or quite all of the organic functions suffer during the process of phthisis. This is evinced by general and local debility, change in the composition of the blood, impaired nutrition and secretions, and diminished animal heat. The special changes which occur in the blood are, diminished red corpuscles, increased albumen and water, and slightly reduced and depraved fibrin.

It is a singular and important fact, that the *tubercular predisposition* is announced by general symptoms, of which those just enumerated as belonging to the disease itself, may be fairly taken as the analogue, and they consist essentially in a lowering of all the vital powers, associated with an obvious change in the constitution of the tissues, and especially of the blood.

It is a melancholy fact that, thus far, consumption has almost defied the skill of the physician, and the potency of medicines. No climate, age or condition is exempt from its insidious ravages; the robust and athletic man, the mere infant—young and old—though not

equally liable, are, nevertheless, but too often victims of the disease. Bred in the very composition of the tissues—bone and muscle—membrane and blood all become contaminated, and finally decay and die as the inscrutible disease spreads throughout the system. There is a period, however, when the disease consists not in a morbid deposit, but in what has been and still is called a *diathesis*, and this is the period when our remedies may be most successfully employed, before a fatal disorganization takes place. This constitutional predisposition has been most erroneously and fatally called a *functional* condition, and not actual *disease;* and until that error is corrected, and a different doctrine embraced, I greatly fear we shall have but little more success in the cure of phthisis than our predecessors. That the condition which has been called the tuberculous constitution or diathesis is something more than a *functional* disorder, is clearly proven by the analysis of the blood, the examination of the tissues, and the general physical conformation. Long anterior to the deposit of tubercles, the blood is found deficient in globules, hemætin and iron, with an excess of albumen and water, and altered or depraved fibrin. This, and but little more, exists during the first stage of tubercular deposits; and yet it is averred that this is *not* disease, but a mere *tendency* to it. The truth is, the tuberculous constitution is a positive disease—which is exhibited in a changed condition of the blood and of many of the solid tissues.

I do not deny the curability of consumption, especially in an early stage; on the contrary, there is, doubtless, a fair proportion of cases, treated judiciously and at an early period, and even pretty far advanced, radically cured, and others, for a time, suspended. But while this is true, we neglect too often the golden opportunity of doing good, by failing to recognize the constitutional derangement as positive disease, and thus wait for fatal organic lessions, of a secondary character, before our agents are applied. The hope of the profession still seems to be that a great *specific* may yet be found capable of curing all cases, and in all stages; but the hope is as vain as the assumption is practically mischievous and fatal. Our country is now deluged with Cod-liver oil, and the professional man is apt to conclude that he has done his whole duty, when this nauseous drug has been freely given. But I fear that experience is here again at fault. No modern practitioner can have more confidence in the cure of consumption with cod-liver oil, than had Beddols in the use of digitalis in that affection. But whatever may be the true merits of cod-liver oil, it is to be greatly

feared that the present indiscriminate mode of employing it can hardly fail to be productive of as much harm as good, and that the mortality of consumption will not in the slightest degree, be diminished by its introduction.

But the science of medicine is not impotent, nor is consumption a hopeless malady. The art of man has not been able to remedy hydrophobia, for we know nothing of its nature; but it is not thus in the tubercular constitution, or the tubercular development. The fluids and solids have been carefully examined, and their deviations from health discovered, and he who has a fair comprehension of these changes, and can diagnose their existence at an early period, may be so fortunate as to arrest disease, or prolong life. It is to this source then that we must direct our efforts. Accuracy in pathology, early and correct diagnosis, and a due appreciation of remedies, and their proper combination, will often crown with success the efforts of the philosophical practitioner; while he who is seeking specifics is soon lost in the mazes of his own groundless conjectures, and is rewarded with disappointed hope, as the fruit of his ill-directed labors.

[G.]

REPORT ON SURGERY,

BY G. VOLNEY DORSEY, M. D., OF PIQUA.

Not one of the sciences cultivated at the present day can claim a more humble origin than that of Surgery; not one can boast of having attained greater elevation, excellence, or precision, or having enlisted in its support a greater amount of talent, of intellect, or of unwearied exertion. The progress of every exact science is necessarily slow — observation and facts are the only foundation on which it can stand. The utilitarian, or, as we perhaps might be allowed to say, the unspeculative character of medical science forbids the play of genius, or the vagaries of imagination. To improve existing conditions, to collect, arrange, classify, and verify facts and observations, are the labors demanded of the cultivators of science at the present day. The era of theory and dogmatism is forever past.

Surgery, as a science, holds no separate or isolated position; like her sister profession of medicine, she calls to her aid the whole list of collateral sciences, and derives from each some auxiliary to assist her in her arduous progress. I have called medicine a sister science — even in this I have made, perhaps, too much distinction between two sciences so nearly conjoined, so nearly identical, that they never can be separated without serious injury to both. The successful practitioner of surgery can never be ignorant of medicine, and it has been truly said that the best physician is he who has the most accurate surgical knowledge. Boerhaave declared that the knowledge and even the practice of surgery was necessary to make a truly skillful physician. Richerand has truly said, "that the science of human disease

constitutes an indivisible whole — that, properly speaking, there are no such things as surgical diseases — since it is only as a Therapeutic means that surgery can be distinguished from the other parts of medicine." Indeed, the great father of medicine, who has left us such valuable medical knowledge and important instruction in his Treatises on Airs, Waters, and Localities, did not disdain to write also on Fractures, Wounds of the head, on Joints and Luxations, on Ulcers and on Fistula. He seems to have regarded surgery as strictly a therapeutic means, as indicated by his celebrated aphorism: "*Quæ medicamenta non sanant, ferrum sanat.*" Thus united in early days, it may be worth while to inquire into the causes which, at a later period, led to a separation between medicine and surgery.

Like many other evils which grew up in the dark ages, to obstruct the progress of science, we find the origin of this in the superstition of the age. In the year 1163 the holy council of Tours, by a special decree, forbade ecclesiastics to engage in any operation which involved the shedding of blood. At that time the practice of medicine in Europe was in the hands of the priesthood and of the Jews, the latter by their intimate connexion with the East, having tasted more freely than most others of the springs of Arabic medicine. The promulgation of this edict caused the priests to abandon the practice of surgery, which by necessity falling into the hands of the Jews, a despised and persecuted race, was obliged to bear no small share of the odium which attached to its practitioners. From this time surgery fell into disrepute. This unholy rending asunder of that which the God of Nature had joined together, was attended with the evil consequences which might have been expected to both parties. For more than 300 years, little or no progress was made in medical science. Surgery, under the ban of the church, sunk into the hands of barbers and charlatans, while medicine, deprived of the fundamental aid of anatomy, became a confused mass of absurd dogmas, wild and extraordinary theories, and mere fanciful speculations. A better day began, however, at last to dawn. The labors of Benivenires, Vesalius, Fallopius and Eustachius, and afterwards of Ambrose Pare, Wiseman, Harvey, Fabricius, Heister, Albinus, and a host of others, who rose above the darkness and prejudice of the times, rescued medicine and surgery from the destruction which threatened them. It is unnecessary to trace this matter farther — the unfortunate distinction between medicine and surgery continued still to too great an extent to prevail,

and it happened most unfortunately for medical science, that while surgery rapidly advanced, building on the foundation of observation and of facts, medicine was too often but an assemblage of crude and ill-digested theories, delivered in the jargon of the schools. Hence, during the 16th and 17th centuries the progress of surgery was decidedly more rapid and more healthy than that of medicine. The introduction, however, of the Baconian philosophy prepared the way for laying aside the science of theories and introducing the science of facts, and now medicine also commenced a truly onward and upward career. Still there existed too much disposition to separate between these two important branches of learning, and to assign to surgery rather an inferior rank, an injustice which continued even during the earlier years of the 19th century. True, great and bright minds, comprehensive enough in their views to take in the whole circle of science, had long seen the necessity of connecting these two branches in order to render either perfect; but their opinions and their testimony, freely borne to the cause of truth and right, were overwhelmed in the vortex of error which seemed to pervade the mass of those engaged in either vocation. The opinion of Boerhaave has been already referred to, and as instances of a similar opinion among men, too, who carried out the evidence of the correctness of their opinions in their works and in their lives, we might mention in England, Pott, Smellie, the two Hunters, and more perhaps than all, John Abernethy; and, at a later day, Cooper, Liston, and Bell; and in France, Sabbatier, Desault, Boyer, Petit, and greater perhaps than any of his countrymen, Bichat, who acknowledged that he owed to his early and earnest study of surgery whatever eminence he had attained in the profession of medicine. I need not mention the many great names of our own country, where, from the actual necessities of a new people, the practice of both professions was continually forced upon the same individual, until all distinction became almost obliterated; but it may be stated, that the establishment of the National School of Medicine at Paris, on the proposition of Fourcroy, at length thoroughly united these two departments, and the labors of the greatest minds of France, England and America, have since been engaged in carrying forward in unison the healing art, as one and indivisible.

Our daily observation convinces us that there can exist truly no real distinction between medicine and surgery in our practice, at the bedside of the patient. In a vast number of diseases it is absolutely

impossible to draw the line between medical and surgical practice — to say where the one terminates or the other begins — for example, in Erysipelas, Opthalmia, Syphilis, in Ulcers of every character, and many other affections, where the general condition of the system exerts so controlling an influence over the local affection as to render correct medical treatment absolutely necessary, in order to secure a successful result.

In our own country, and more especially in the West, the very situation of the practitioner has forced him to unite in his own person the surgeon and the physician, and to this fortunate concurrence of circumstances we are, doubtless, indebted for that spirit of fearlessness, of originality in treatment, and decision in action, which marks the character of the American surgeon. Learning early to embrace, in one comprehensive view, the whole circle of disease, and to throw aside, as unworthy, the cultivator of true science, the dicta of authority, and the shackles of precedent, his practice is based on great physiological and pathological principles, which forbid him to draw any imaginary lines of distinction between different systems of the body, or to regard diseases as confined in their action to any particular locality, where the whole body, bound together by immutable laws, is a united whole, necessarily comprehending in itself every part. Hence, too, American surgery, while characterized by great boldness can also claim for itself the praise of more than usual success, because our treatment and our opinions are based upon those laws which are recognized as governing the whole human system.

In order to have a more clear and comprehensive idea of the actual state of surgery, as it exists among us at the present time, we propose to present to the Society some brief remarks on its various departments, giving our attention primarily and most prominently to those parts of the art which are of most frequent occurrence in the hands of the general practitioner, and which must, of course, be of greater interest and practical utility, to the majority of those who hear or who may read this report.

Fractures and dislocations, with the treatment of the diseases of bones and joints, form, by far, the most extensive department of surgical cases in the list of the ordinary private practitioner; hence his attention is commonly directed to cases of this nature.

In the treatment of fractures, the selection of proper apparatus, in the way of splints and dressings, forms the first and most important

item of practice. Almost every year we see some new apparatus for that most common and troublesome of all the fractures of the human body, that of the clavicle. The old plan, which was almost exclusively in use a few years since by American surgeons, as laid down by Physick and Dorsey, though undoubtedly founded on scientific principles, and capable of fulfilling all the indications necessary to produce a good cure, was nevertheless cumbrous and unhandy, and continually liable to become misplaced, especially in children in whom more than one-half of the cases of this fracture occur. The apparatus recently introduced in this State, consisting mainly of a neck-yoke, by which the neck or the cervical vertebræ is rendered a point d'appui for fixing the movable humorous, is much more simple, and easier, both for the patient and the surgeon. I have used it in a large number of cases, and have had every reason to be satisfied with its effects.

After much difference among able surgeons, it is now very generally conceded that the strait position in fractures of the thigh is that which, as a general rule, is best adapted to produce a good limb. I have used it myself in over twenty cases of this fracture, and I believe I can say truly, that I have never seen a perfectly good cure effected by any other means. To maintain perfect immobility of the limb, so that the opposition of the fractured ends of the bone may, in no case be disturbed, even by the necessary and unavoidable movements of the body, is the great requisite in the treatment of this fracture. This indication is more completely fulfilled by Physick's modification of Desault's splint, than by any apparatus, however complicated, which I have ever examined. The objections frequently urged against it on account of the rigid confinement which it compels, and the pressure of the bandages, which, it is very true, is sometimes rather annoying, are all of small account compared with the satisfaction which is felt at the completion of a case in beholding a perfect limb. The support given to the limb also, does away with much of the danger of an ununited fracture. After having waited patiently the required time for the union of the bone, and caused our patient to submit to much suffering, and to a long and irksome confinement, nothing can be more harrassing than to find that no union has taken place. This is, fortunately, a very rare occurrence in private practice in the West. The excellence of the constitution of our patients, or, at least, their freedom from those taints of the system which are supposed to prevent the union of bones or the deposit of osseous material, may, perhaps, be

the reason why we are seldom visited with any difficulties of this character. A very interesting case which occurred in the practice of a friend, may, perhaps, be worthy of being related. If the opinion expressed by Mr. Syme be correct, that the principle obstacle to bony union is found, in not maintaining perfect immobility of the parts and apposition of the ends of the fractured bones, it is surely a matter of no little surprise, that more cases do not occur in country practice, from the very imperfect appliances frequently used for these purposes. I have seen several cases of fractured femur where a single splint on the outside of the limb, with a very few imperfect, short pasteboard splints at the point of fracture, were, with some rather awkwardly applied bandages, the entire means trusted to for procuring a cure; and yet, in these cases, although there was frequently great deformity of the limb, still bony union did take place. Indeed, although immobility of the parts is certainly highly necessary in order to insure a good limb, and produce union in the early stages of a fracture, it would yet seem by no means so necessary in cases where, from any cause, union at the proper time has failed to take place. We have several cases detailed by Mr. Ferguson, in the Lancet, for August, 1852, in which the desired union was produced by encasing the limb in gutta percha, and allowing the patient to move about freely, for the purpose, apparently, of producing the amount of inflammatory action necessary for a cure. Indeed, whenever this can be produced, and anything like a proper degree of apposition of the ends of the bone maintained, bony union is almost certain to take place. Various means have been in use for the production of this necessary inflammation, such as friction, the seton recommended by Dr. Physick, and the ivory pegs of Dieffenbach, which have lately been used by Mr. Ferguson and also by Mr. Watson, of Edinburgh. Friction, however, whenever it can be adopted with any prospect of success, is, undoubtedly the means to be preferred, being much less likely to be followed by unfavorable results to the patient, and doing away with the unfortunate necessity of rendering a fracture compound by opening the flesh, as is done in both the other methods. The use of Anesthetics enables us to use friction to any amount that may be needful, without any suffering on the part of the patient, and whenever the ends of the bone are free from any softening — healthy and firm — there is no doubt an amount of friction necessary to produce active inflammation, may always be used.

On the 26th of November, 1853, I was called to see Miss C., aged sixteen, who, two weeks previously, had suffered a fracture in the upper third of the femur of the right side. The limb had been set by a respectable young practitioner, with the long outside splint of Dessault, with a moveable footpiece now in common use in this State, but without any inside splint and evidently without any sufficient support beneath the limb—from an over anxiety too, to have a perfect limb, there was perhaps too frequent motion of the moveable shoe, to which the extension bandage was fastened, and this may have had some effect in producing the failure of union in the bone. Much constitutional irritation and suffering ensued, and at the end of eight weeks on removal of the splints the bone was found still ununited. A starch bandage and some short splints were applied, but the pain on motion and the irritation of the limb were still very great, and consequently two weeks after the removal of the splint, I was requested to examine the limb. Finding the case as above described, I proposed to administer Chloroform, use friction of the ends of the bone, then re-apply the splints and give the bone an opportunity for reunion. This was accordingly done on the 27th November. She was brought completely under the influence of the anesthetic, a mixture of, Chloroform 1 part, Sulphuric Ether 2 parts; the bones were freely rubbed for fully two minutes, then carefully placed and Physick's long splint carefully applied with a strong splint cloth for supporting the leg. The night after the leg was adjusted she complained of considerable pain in the head, but made very little complaint of the limb or of any of the bandages. Cold applications were used for the purpose of relief, and also some anodynes administered; the bowels were freely opened, but the pain continued to increase, and finally strong spasms supervened which continued several hours, and were finally arrested only by the administration of Chloroform, after which they immediately subsided and did not manifest any strong disposition to recur. A blister to the back of the neck seemed to remove all cerebral difficulty, and the case progressed as favorably as could have been expected, in a patient suffering much from abrasions of the skin produced by her already protracted confinement. After seven weeks the splints were removed, and bony union was found to be complete. The limb is only about three-fourths of an inch shorter than the sound one. A question of considerable interest arises here for examination—why did bony union fail to take place after the first adjustment of the limb, in a healthy subject, and

when the degree of immobility maintained by the apparatus used would seem to have been sufficient for that end. Did the fever and irritation, which supervened in the progress of the case, arise from want of proper adjustment or sufficient immobility of the parts, or were they the consequence of some other constitutional cause, and being thus produced, prevented the desired union? Not having seen the patient in the progress of the first ten weeks, I cannot answer these questions satisfactorily to my own mind, but they are worthy to be taken into account before casting any amount of censure on those having charge of the case during this time.

In fractures of the fore arm, a desideratum in surgical science, is the introduction of a splint which will sufficiently press apart the bones, so as to preserve in their perfection the pronation and supination of the hand, and at the same time not produce so much pressure between the tendons of the flexor muscles in the lower half of the arm and the interosseous ligament, as to cause adhesion of the parts and consequent loss of the full power of flexion and extension of the hand and fingers; this is a very common accident in fractures of the fore arm, and very frequently all our care will not save our patient from some difficulty in this respect. The wooden splint modelled to fit the arm, with a few graduated compresses, affords the best means of remedying this defect, while the splints of felt and gutta percha, by their warmth and closeness. preventing the escape of the perspiratory matter, favor, in my opinion, the agglutination of these parts.

Dr. Gunn, of the University of Michigan, has advanced a new idea on the subject of the reduction of dislocations — he holds that in these injuries, more especially in dislocation of the hip joint, fortunately a very rare accident, the difficulty of reduction arises not so much from the resistance of the muscles, as from the rent in the capsular ligament, tightly inclosing the neck of the bone, and hence force applied in the direction of these muscles, or continued for a length of time with a view of overcoming their resistance, by means of pulleys or adjusters, can be of no service, as the bone cannot in this way regain its place except by farther rupture of the capsular ligament. Hence he adopts the method, and as he says with success, suggested by Prof. Reid, of placing the limb in such position with regard to the joint as to open or relax the fissure in the capsular ligament and hence facilitates the replacement of the bone in the acetabulum.

An interesting case of internal abscess of the tibia has been fur-

nished me by Dr. P. Allen, of Kinsman. The patient had suffered some seven or eight years previously from necrosis of this bone, which had been caused by an effort of nature in throwing off the necrosed part. At the end of this time he was afflicted with severe pain in the tibia, which at length produced such serious constitutional disturbance as to threaten a fatal termination. Internal abscess of the bone being suspected, an opening was made, the matter discharged, and the patient rapidly restored to health.

Drs. O. and J. Crook, of Dayton, have also furnished me the notes of a very interesting case of exostosis of the tibia, in which the patient suffered excessive pain, insomuch, that not deeming it advisable to await the process of nature in removing the offending part, it was taken away "by the use of a carpenter's mallet and chisel," thus removing a mass of spongy, porous bone, resembling worm-eaten wood, weighing one ounce, and filling a quinine bottle three fourths full. The patient was immediately relieved of pain, the wound did well, although some months afterwards a small portion of bone became necrosed and was thrown off, the leg becoming subsequently entirely sound.

Dr. Gaston, of Morristown, has presented me a case of irritable ulcer of the leg, over the lower third of the tibia, following an attack of Phlegmasia dolens, which had for five years "resisted the skill of five physicians and a Dutch woman to boot." The ulcer was about an "inch and a half in diameter, with uneven bottom and very ragged edges, discharged a bloody sanies, and is surrounded by an inflamed halo which extends two inches from the ulcer on every side, and is very hard and tender to the touch." After applying several remedies ineffectually, the ulcer was entirely healed, by the us of Dr. Higginbottom's black lint, prepared as directed in the London Lancet for 1850. (Take Nitrate of silver ℥i, distilled water ℥ij, make a solution in which saturate half an ounce of fine lint; then expose the lint in a flat, shallow vessel, until it dries by evaporation.) The sore was washed with a solution of nitrate of silver ℥i to ℥i of water, the lint applied and covered over with lint spread with basilicon; a roller was then applied from the toes to the knee. The dressing was allowed to remain two days and a half, when a deep eschar was formed all over the inflamed surface—swelling, pain and soreness much abated — the second dressing remained on four days; the third and fourth six and eight days respectively — "the eschar was then separating fast, and so

far as could be seen underneath, the sore looked sound and healthy." It was now dressed simply with basilicon and a roller bandage, and was soon entirely healed. While using this treatment, the patient took the following powder: Rx. Opii, gr i; Calomelas, gr ii; Pulv. Antimonial, gr iv, every night, and a cathartic dose of salts and senna every second morning, when slight ptyalism supervened, the powder was omitted, cathartic continued. The Doctor well observes, that old sore shins have long been the opprobrium of surgery, and thinks the success of Higginbottom's treatment in this case, entitles it justly to the attention of the profession. It will be well however, to bear in mind the internal course pursued, to which, it is very probable, much of the success was really due.

Dr. Comegys, of Cincinnati, has presented the history of two cases of anchylosed joints, treated by applying mere physical force to break up the adhesion, the patients being previously placed under the influence of an anesthetic. Consequent inflammation was successfully combatted by wraping the joint in cloths wrung out of cold water. In this manner, anchylosis of the knee joint, in a little girl aged 10 years, was successfully treated. She having been fourteen times under anesthetic influence. The same treatment was successful in another case of anchylosis of the elbow joint. The Doctor remarks that he commenced this plan of treatment before he observed that a similar method had been adopted by some European surgeons. It is certainly worthy of trial in all cases, for although Sir A. Cooper has stated authoritatively, that no attempt should be made to cure true anchylosis, still the success of Langenbeck at the Berlin Hospitals, in the case of graduated force applied to patients under the influence of chloroform, has been such as to recommend the practice to the attention of surgeons. For some interesting remarks on this subject, reference may be had to Braithwait, No. 28, p. 160; and to the Glasgow Medical Journal for July 1853, p. 178.

In amputations I am not aware that anything new can be presented to the profession. Amputation is only the last resort of the surgeon, his resource, when skill and science fail, when he feels compelled to dismember the body to preserve life. I can only say in my own experience, the flap amputation in all cases, where it can possibly be used, is the best mode of operating, saving pain to the patient, expeditious in point of time, forming the best stumps when the pressure is to be applied, and if carefully graduated in size, not liable to the objection

often urged against it, of being likely to form sinuses for matter, thus retarding the cure.

Injuries of the head form an important and interesting class of surgical cases. The amount of injury at times sustained without loss of life is truly surprising, and warns us never to despair of relief from the mere extent of the injuries done to the head. One or two cases present themselves to my mind, which may be worth relating in this connection.

Case 1. On the 24th day of August, 1852, Phillip Hartzell fell about fifteen feet, from the top of a bridge crossing Stillwater river, into the bed of the stream, striking the forehead against the corner of a large stone, the force of the blow being increased by the weight of a heavy piece of timber which struck upon the back part of the head. On examination, he was found to have suffered extensive fracture of the frontal bone. The bone was broken into more than a dozen fragments, and was removed from a space extending latterally from the middle of the frontal sinus of the left side to near the external edge of the sinus of the right side, and perpendicularly, from near the coronal suture to the junction with the nasal bones. Both sinuses were in this way freely laid open, the fracture of the external table being more extensive than that of the internal. The dura mater was lacerated in several places; the substance of the brain was not broken. The patient lay insensible for three hours, but, as the pieces of the bone were removed, and the clotted blood taken from the wound and from the sinuses, he gradually recovered his sensibility. The bleeding from the cut and wounded arteries was profuse. Several were twisted to prevent hemorrhage, none were tied. The pieces of bone being carefully removed, and the wound cleansed, the thick skin and muscles of the forehead were brought together over the wound, and were retained in place by stitches and adhesive straps, leaving an opening over the right side, on which he was made to lie, in order to favor the elimenation of matter and blood. On being placed in bed, the head was closely shaven and surrounded with ice. Considerable fever supervened, which was met by bleeding and purging, and fortunately restrained entirely within bounds. The recovery of this patient was rapid, the wound healed kindly, and in six weeks he was able to move about his house. The forehead is flattened, and indeed rather concave than convex, from so extensive loss of bone; but the patient pursues his ordinary occupation of a carpenter, without any difficulty, and has entire use and control of his mental faculties.

Case 2. About the 11th September 1853, Thomas Withers, a young man in Greenwood's foundry and machine shop, in the city of Cincinnati, was struck by the handle of a windlass, which broke and flew off violently, while used in hoisting a very heavy weight. The blow was in the left parietal bone, at the superior side, rather posteriorly, breaking out and depressing a portion of bone about one and a half by two inches in size. The dura mater was torn, and the substance of the brain much injured. These facts I learned from Dr. Carey, who, in connection with Dr. Fries, was called to attend him. The whole left side was completely paralyzed; he was entirely insensible; breathing stentorous. Very slight relief followed the removal of the pressure from the brain, violent inflammation ensued, which was combatted by the proper remedies. Extensive suppuration of the wound followed, and a fungus began to shoot from the brain. About eleven days after the accident he was removed by railroad ninety miles from Cincinnati, to Piqua, and placed under my care. He was sufficiently sensible to recognize, slightly, his family and friends; paralysis still complete on the left side so far as the limbs were concerned; pupils much enlarged, and only slightly affected by light; speech not at all affected; protruded the tongue when ordered, and showed no sign of paralysis in this organ or in the muscles of the face; wound in the head discharging offensive matter; large fungus protruding. The fungus was removed freely with the scissors and a piece of sponge laid over it, surmounted by several folds of sheet lead which were firmly bound down by a roller bandage; this pressure appeared to give much relief, for while well kept up he seemed quiet and easy, but became very restless and unmanageable if the bandage became loose so as to remove the requisite pressure. With this pressure, and the occasional application of nitrate of silver, the fungus in about three weeks ceased to grow and the wound commenced healing; the discharge was now free from any offensive odor. By the last of October he was entirely restored in mind, the wound closed to the size of an inch in length by three-fourths of an inch broad, paralysis of left limbs still complete. By the assiduous use of Galvanism the leg very soon became nearly free from paralysis; no effect was produced on the arm and hand for many weeks afterwards, and then only very slight. He now walked about freely, was cheerful, and had an exceedingly voracious appetite, which, however, he was carefully warned against indulging. He continued in this state until about the first of January, when he had a slight

spasm — not followed by any unpleasant consequences — two weeks afterwards a more severe spasm followed; there was now intense pain in the head, but the mind was not disturbed, the skin over the wound in the head became very full and protuberant, indicating the presence of matter, but a lancet freely inserted failed to reach its seat. The pain in the head continued unabated and rather increased for several days; considerable stupor supervened, with occasional slight spasms; the unfavorable symptoms all increased in intensity, and he died on the 27th January, 1854, about four and a half months after the accident, with all the well marked symptoms of pressure on the brain. Being necessarily absent from home at the time of his decease, a post mortem was instituted by my partner, Dr. Brownell, assisted by Dr. O'Ferrall, which revealed the following state of facts. Beneath the original wound which had still a small aperture, was about half an inch in thickness of sound brain, beneath which opened a cavity in the substance of the brain, capable of containing about one gill of pus, and completely filled, the matter extending more or less into all the ventricles. This pus had evidently been accumulating during the whole process of cure, and although an external opening still remained, it had not been thrown out, but had continued to increase in quantity and penetrate into the cavities of the brain, until it produced the fatal effects recorded above. Could the actual state of the case have been divined, relief might, I suppose, for a time, have been afforded by a deep incision, evacuating the matter and removing the pressure.

The most interesting feature in this case, aside from the fact of a patient being able to live and apparently enjoy good health for two months, while such an amount of matter was accumulating in the brain, is the effect produced on the fungus growth of the brain, by the sponge pressure covered with sheet lead. The yielding character of the damp sponge allows an amount of pressure to be thus applied, which the brain would not tolerate from any other substance, and while the fungus growth was thus rapidly checked, and healthy action induced, the comfort of the patient was evidently greatly increased.

The extirpation of tumors, more especially of those which are cancerous in their nature, is a part of surgery often demanding much judgment and discrimination. It is a matter of doubt, among able members of the profession, how far the surgeon is justifiable in removing cancerous growths, where there is an evident disposition in the system to their production. It will undoubtedly be difficult, if not impos-

sible, to lay down any rule which will be of unexceptionable application in these cases. We may commence, however, by stating, that cancer, being itself a foreign and abnormal growth, and at the same time, that it springs from a vitiated state of the blood and secretions, having the tendency and the power to keep up the very state of things which has produced it, it becomes us, whenever we can do so without danger, to remove it, not only as a product, but also as a cause of diseased action. We have all seen many cases where the removal of tumors, scirrhus or otherwise, has been followed by marked improvement in the general health of the patient, who had been suffering for years under an impaired constitution, which appeared, however, after the removal of the cause of irritation, to be restored in a very short time to its original vigor. I call to mind the case of a lady, the wife of a most worthy physician, of a county neighboring my own, whose health had for years been declining under the influence, as was truly supposed, of a large steatomatous tumor, growing on one side of the spine, just below the projection of the scapula. After much hesitation she consented to its removal, and I accordingly dissected out a diseased mass, weighing about two pounds. So soon as the wound was healed, an improvement of the health was apparent, and she has now continued for many years in the enjoyment of a degree of health which there is no reason to suppose she could have attained without the operation. In the removal of scirrhus or cancerous growths, great care should be taken to remove the whole body and branches of the tumor, not only for the reason that the part remaining is liable to reproduce the growth at any time, but also, for the equally important fact, that the juices or secretions thrown out from these tumors, when cut into and partially left in the body, being taken up by the absorbent vessels, and conveyed into the general circulation, produced, as I have too frequently seen, in badly performed operations, consequences the most disastrous to the health of the patient. A lady had for some years been troubled with a painful tumor, seated in the external side of the right breast. It continued to grow until it involved greatly, the glands of the axilla. In an evil hour, she consented to its removal by an inexperienced surgeon. He cut boldly, while dissecting above the mammary gland, but finding the tumor spreading outwards and involving the auxillary glands, when more accurate anatomical knowledge was necessary, to enable him to cut without wounding important vessels, he carried the knife through the body of the tumor, allowing the portion in the axilla

to remain unmoved. The consequences were most horrible; the whole system in a few weeks seemed penetrated with the poisonous exudations of the tumor—malignant fungi sprouted from the edge of the wound next to the remaining tumor, which refused to be healed by any appliances—her health rapidly declined, and she sunk under excrutiating suffering to the grave. In cancerous affections of the breast, it is better, as a general rule, to remove the whole gland, than to trust to dissecting out the diseased parts, and if the axillary glands become involved, let them also be removed. The number of arteries, branches of the external mammary, requiring ligature, is often very great in this operation, and, as in cases of females, it is important to guard against too great loss of blood, the surgeon will usually find it better to tie them as he proceeds, than to take them up after the removal of the gland. He may in this way lose something of the *eclat* of removing a large tumor in a given number of seconds, but he will be more than compensated in the increased comfort and safety of his patient. In 1848, I removed the entire mammary gland of the right side from a lady of Winchester, Indiana. It was much enlarged, and exceedingly hard and scirrhus throughout its whole extent. When deprived of the blood and liquid matter which ran out, the remaining indurated mass still in possession, weighed six pounds. During this operation, I tied and twisted ten different arterial branches. Many years ago, I met, in an old gentleman, a very singular case of scirrhus enlargement of one of the glands of the neck. It was lying under the chin, just above the thyroid, and immediately across, and in contact with the trachea, which it pressed upon so much as at times to incommode him greatly in breathing. It was exceedingly hard, more so I think than any glandular enlargement I have ever met. There was no serious difficulty in its removal, and its great consistency and singular position alone render it worthy of mention.

In connextion with tumors about the throat, I have the privilege of presenting an interesting case of wound of the throat, in an attempt to commit suicide, furnished to me by friend Dr. D. B. Van Tuyl, formerly of Dayton, now of South Bend, Ia. The wound was made with a razor, making a complete division of all the parts, from the integuments in front to the posterior wall of the pharynx. The direction of the cut was on a line with the plane of the hyoid bone, between that bone and the top of the larynx, and dividing the pharynx in about *two* thirds of its extent. The external wound, measured by the surface of

the neck, was between three and a half and four inches in extent, gaping much when the head was thrown back and exposing the top of the layrinx and the cut edges of the pharynx." When the wound was open he could produce no articulate sounds, but by bringing the head forward he spoke "distinctly with ease." An attempt to confine the wound by stitches produced violent spasms of the respiratory muscles, therefore the wound was simply closed by bringing the head forward, confining it in this position, and applying water dressings. He was fed by a gum-elastic tube passed into the pharynx, through the nostril. On the seventh day of treatment, three sutures were put in to prevent the external wound from inverting itself within the lips of the wound. On the fifty-second day, "the external wound had been closed four days." He breathes and swallows with perfect ease. "It is therefore certain that the internal parts are all united in their proper places."

Dr. Van Tuyl calls our attention to some points of interest in the case, with the following remarks:

"1. It is the third case in which I have noticed pain or soreness in the muscles of the fore-arm and chest, in persons laboring under suicidal monomania." (The Doctor had prescribed for him for these symptoms, previous to being called in the case of attempted suicide.)

"2. It demonstrated in a manner which I had never before witnessed, the entire dependence of the organs of speech on each other, for the formation of articulate sounds.

"3. Had this wound been closed in the ordinary way by sutures and adhesive straps, the patient would have suffocated before the close of the fourth day. The note of the fourth day reads as follows:

"6 A. M.—Rested badly last night — wound suppurating profusely which renders respiration quite difficult, even distressing to witness at times — expectorating freely through both the wound and the mouth.

"4 P. M.— Still restless, great fears of choking, suppuration profuse."

"A similar case occurred at Niles, ten miles from this place, about four years since. The wound was 'neatly dressed,' as I was assured, and the patient died on the third day."

Another case illustrating very forcibly the recupurative powers of the system, after the destruction or injury of important parts, is given by Dr. Shackelford, of Medway. A man who was caught in the revolving shaft of a threshing machine, had the scrotum and the integuments

of the penis torn away. "The wound extended from the middle of the os pubis above, to the middle of the perineum below." "The testicles were uninjured and hanging pendulous by the cords, which were exposed to the upper extent of the wound." The wound "was dressed with lint, spread with simple cerate, carefully enveloping the testicles and placing a cushion below to support them." At the "end of six weeks, the wound was entirely healed." The testicles "are seen immediately below the external abdominal ring on each side, giving something of the appearance of a case of double hernia." This case the Doctor thinks is more interesting, as demonstrating the fact that fleshy granulations may arise from a fibrous membrane, like the tunica albuginea of the testis.

Operations for the permanent cure of Hernia have, of late, attracted very considerable attention. It is confessed that the radical cure by means of the truss is seldom effected in adults, although it may almost always be done in children, and it is certainly a matter of great interest to the profession to learn any other safe and efficient mode of treatment which will cure any considerable number of cases. The operation by Dr. Wood, of Cincinnati, proposing, as it does, the approximation and agglutination of the pillars of the ring, and thus guarding against the continuance of the tendinous opening in, at least, its former size, certainly offers inducements to surgeons to make it the subject of further experiment. The operation of injection by the subcutaneous method offers, certainly, a very simple and easy method of cure, and one which, in many cases, doubtless, would be successful, nor as a general rule can it be attended with material danger. Dr. Haywood, from a Committee of the Massachusetts Medical Society, has reported in favor of this method, as the safest and best known to the profession; but still deems compression, in the present state of our knowledge, "the most likely means of effecting a radical cure in the greatest number of cases"—a conclusion, the correctness of which, so far as adults are concerned, may, I believe, be reasonably doubted.

The subcutaneous method of operating in cases of strangulated hernia, has been introduced by Mr. Gay, of the Royal Free Hospital, Edinburgh, and has been attended with great success in his hands, and those of Mr. Ferguson. In many cases, especially in those where there is no reason to apprehend the occurrence of gangrene of the intestine, it is certainly much preferable to the old mode of laying open the whole extent of the hernial tumor, and making an extensive wound without any corresponding benefit.

The great error in the operation in cases of strangulated intestines, is certainly in delaying the operation until the time for its safe performance has passed. It cannot too often be repeated, that in these cases no time is to be lost, even the taxis must be sparingly employed — relief by division of the strictures is certain, easy and safe, when timely performed, whereas delay brings death to the patient, and discredit to the operator and to his science. Dr. Hurxthal, of Massillon, has given me a case which occurred in the practice of Dr. Schertzer, of that place, in which, by the obstinacy of the patient, the operation was delayed until the fourth day, gangrene had, of course, taken place and the patient fell a victim to his own folly.

In this connexion, I am also permitted to introduce a case of gunshot wound of the abdomen, in which the termination was singularly fortunate, demonstrating the great efficacy of the restorative efforts of the system in cases of serious injury. In this case the patient received a portion of the contents of a gun, loaded with duck-shot, in the left iliac region. "There was great constitutional prostration, followed by inflammation of the peritoneum and suppuration, discharging at the at the original perforation of the integuments." Shortly fecal matter began to be passed in the same manner, showing evident perforation of the intestines. This continuing five months, and attended with much suffering, he finally consented to have the abdomen opened for the purpose of discovering and closing, if possible, the wound of the intestine. The previous injury and inflammation had, however, so "consolidated and displaced the parts," that the exploration failed in reaching the seat of the injury — thus far the operation seemed to have been barren of good results — the excitement, however, produced by the operation, though moderate in amount, seemed to produce new vigor in the vital organs: the discharge declined gradually, and finally entirely ceased: the patient recovering his full measure of health and strength. This case, furnished by Dr. Hurxthal, occurred in the practice of Dr. Dougherty, of Greentown, and Dr. Whiting, of Canton.

Iodine injections have been lately much recommended in cases of fistula in ano. I can only say, do not trust them; the only trustworthy agent in complete fistula is the knife, and the operation is simple, easy, and almost sure of success, when carefully performed. I speak now of true fistula, which is always attended with two openings, an internal one in the rectum, and an external one more or less removed from the verge of the anus. The connexion between these

is often tortuous and difficult to find; often impossible to follow with a common probe or strait director; but, in these cases, let the surgeon pass his director as far as he can carry it, and then, carefully cutting down on it as far as it goes, let him start it anew, after finding the continuation of the passage, and he will ultimately arrive at the orifice in the rectum, which is then to be carefully laid open through the whole extent of the intestine, involved between the internal opening and the anus, dressed with lint down to the bottom of the cut, and healed carefully from the bottom. In operating, in a great number of cases, I have never seen any injury to the functions of the sphincter result from this proceeding.

Orthœpodic Surgery, as means of remedying a very common deformity, is becoming daily more practiced and more favorably known, insomuch, that I think we may fairly anticipate that the day is not far distant when club-foot, in all its varieties, will be banished from the adult race. It is an operation which should always be performed in childhood; the most favorable time is shortly after the child has commenced walking, then, so soon as the foot is sufficiently healed to be placed on the floor, the use of the limb, and the pressure of the weight of the body on the foot tends strongly to force out the contracted tendons, and restore the natural position. Operations performed, at this time, scarcely ever fail; prior to this time they may do so, and, if the child is allowed to grow up and become large, we have the additional difficulty of mis-shapen bones superadded to that of contracted tendons, rendering the process of cure more tedious, and far more painful. I have always put on the splint immediately after the division of the tendon, made some extension at once, and increased it gradually from day to day, as it could be borne by the patient, until the position of the foot became perfectly natural.

We need not, however, so carefully mention the various operations in the different departments of surgery, since it is important rather to consider the matter in general, than in detail. We may remark that, throughout the State, more attention is daily paid to surgical science, more operations are performed, and they are better and more carefully done than in former days. The more general introduction of the knowledge of practical Anatomy will account much for the increased success of surgical practice, and to this we may add another important adjuvant, the use of anesthetic agents. What can more forcibly mark the progress of human knowledge and improvement, than a

comparison between the former mode of amputation used by the old surgeons, when a red-hot knife was demanded in order to prevent the hemorrhage from divided vessels, thus inflicting the most horrible torture on the unhappy patient, and the painless and bloodless operation of the present day, when the patient is roused from a happy state of insensibility, only to be informed, that the dreaded operation is already performed, and the hour of suffering wholly past. There is — there can be no greater triumph of science than that which enables the surgeon to perform the most painful operations demanded by suffering humanity, without giving the slightest pain.

The amount of danger attending the use of anesthetic agents is an important subject of inquiry for the surgeon. He has certainly no right to endanger life, even to avoid pain, at the same time the use of anesthetics is so important, not to say essential. that it becomes him to employ every power of research and investigation to enable him to persevere in their use without subjecting his patient to danger. Scientific chemists have made careful and learned comparisons, drawn from well conducted experiments between the respective merits of Ether and Chloroform. It may, I think, be fairly deduced from these researches that Chloroform is, in many cases at least, a more dangerous agent, when used alone, even if obtained of the greatest purity, an object frequently of difficult attainment, than when combined with the Ether. The details of these experiments are open and known to all. I may, perhaps, be allowed to mention the conclusions at which I have arrived, after observing the effects of Chloroform, and also of a mixture of Chloroform and Ether, in a very considerable number of cases.

The anesthesia produced by Chloroform is more entire than that produced by the mixed agents, it is more quickly induced, the effect on the pulse is greater, it usually becoming slow and small under the effects of Chloroform, while it is frequently almost unaffected by the mixture, or is accelerated rather than diminished in activity. The anesthesia being more complete, the recovery from its effects is also generally much slower, and is, very frequently, attended by nausea and vomiting, which seems to be an indication of a certain fullness or shock about the brain, since we often see the same symptom in concussion of this organ — this symptom rarely, if ever, occurs after the use of the mixture. I have used the mixture of two parts of Ether to one of Chloroform in persons of all ages — even in infants of six months old — and I have never seen any approach to dangerous symptoms

from its use. From five to eight minutes are usually required in order to produce its full effects in the system, and sometimes even longer: this allows a free intermixture of atmospheric air in the lungs, and, consequently, obviates much of the danger; indeed, it may be regarded as a perfectly safe, and, at the same time, perfectly reliable anesthetic.

Although our patients are free from the pain of operations, while under the influence of the anesthetic, yet we are to remember that the system of organic life still suffers, and that it is entirely possible that the shock here may be so great, that when the anesthesia is removed, and the system of animal life becomes again sensible of pain, its severity may be such as to induce dangerous consequences, to a degree as great as if the pain of the operation had been felt during the whole period. This should warn us to be very careful about inflicting any unnecessary pain, even although our patient may be, for the time, incapable of perceiving it. A question of some interest arises in connexion with the case of the young girl, whom I mentioned as undergoing the operation of resetting a fractured femur. She complained of considerable pain in the head the night after the leg was adjusted, which increased for about twelve hours, in spite of various appliances, until, at length, strong spasms were produced, which, after continuing several hours, were finally arrested by again administering Chloroform and Ether. Now, I do not suppose these spasms were produced by the action of Chloroform on the brain, inasmuch as the re-application of this agent procured almost immediate relief, nor do I attribute them to any undue pressure of the bandages, since no complaint was made on this head; and, besides, on the first occurrence of the spasms, fearing some evil from this source, I immediately caused all the dressings to be loosened, but without producing any relief whatever. It may then, I think, be fairly deduced that, in this case, the nervous irritation produced by a very severe operation, was communicated to the brain and spinal marrow, and produced there its full effects, when the anesthesia was passed away. It would seem, therefore, that the anesthesia being past, the system may still, in some cases, be dangerously affected by the pain of an operation to which, during its progress, it was totally insensible.

I cannot forbear here making a few remarks, on a subject of much interest to one portion of the surgical profession. I refer to the right of the inventors of surgical instruments, to secure to themselves the profit of these inventions by patent, and thus to use them for their own

benefit and emolument. Our profession has suffered so much by patents, in the hands of inventors of quack remedies, that we have come to regard with suspicion and disfavor every attempt to secure gain by patenting professional knowledge or skill. It is possible, however, that in this way we may carry our peculiar ideas too far. We acknowledge the claim, which an author has to copy right in the book which he has elaborated from his own brain, and while we all use his knowledge, and appropriate to ourselves his ideas, we are forbidden to print, or sell his works, or infringe in any other way upon his property therein. In the same manner, the instrument invented by the skillful surgeon or mechanist, is open to the use of all; all may purchase and use it, as they can the book of the author; they may explore its principles of construction and action, and appropriate its benefits by using it on their patients; but they are forbidden, and very justly too, to encroach on the right of property, held by the inventor in the instrument, which he claims the right to manufacture and vend, as the author manufactures and vends the different copies of his book.

This is, I believe, a true view of the case. And by this, inventors of of valuable instruments are, undoubtedly, entitled to property and patent right in their inventions. The interest which the practitioner of surgery has in the introduction of valuable apparatus, should cause us to hold out such inducements to those who are able to furnish us instrumental aid in our arduous duties, as will repay them for their expenditure of time, talent, and money, in bringing different parts of of surgical apparatus to perfection. Professional fame, and professional praise, are certainly strong inducements to exertion, but they can hardly be said to repay him who has spent weary days and nights of toil in order to produce some valuable invention, while he has thus allowed the profits of professional practice to elude his grasp, and must look for support and remuneration for his exertions from the sale of the product of his genius. To this he is entitled, and he should suffer no loss of professional caste by endeavoring, in all proper ways, to secure it.

I have already mentioned the study of Practical Anatomy, as one of the principal promoters of true Surgical Science. We all know the prejudices which exist in the community against this branch of our profession, and the difficulties, thereby, continually thrown in the way of prosecuting our researches; nor has the general progress of knowledge and enlightenment opened facilities in this direction, as we might

reasonably have expected it to do. On the contrary, the increased disposition to uphold various systems of empiricism, which profess to cure all the ills to which flesh is heir, without the necessity of any accurate knowledge of the human system, has contributed, in no slight degree, to throw additional obstacles in the way of anatomical investigations. It is one of the first duties of the physician to labor for the banishment of these unfortunate prejudices from society, and throw, wide open, every door of improvement, by which skill in our profession may be acquired, and the woes of the family of mankind mitigated or diminished. In the State of New York, a law legalizing the pursuit of Practical Anatomy, has lately been passed by a large vote in the State Legislature, giving us, it would seem, some evidence of a feeling of the right kind, on this subject, in the minds of intelligent men. It is our duty to labor in our own State for the enactment of some similar provision among our statutes. Such a law would do much in advancing the science of Surgery, and ministering to the wants and sufferings of the people. The more general the diffusion of scientific skill and knowledge, the greater the advantage which the whole people derive from the profession. When professional skill is confined to few, the masses of society must often suffer for want of proper medication. More especially is this true among the lower ranks in society, whose poverty prevents them from securing the services of skillful professional men, when they are few in number, and their services demand large compensations. But this class, although usually most strongly opposed to the pursuit of anatomical researches, are the greatest gainers by the great diffusion of true science, and skill, in medicine and surgery. In the twelfth century, the powerful Leopold, of Austria, having mashed a limb by the falling of his horse, was unable to find a surgeon who would undertake its amputation. Stung to madness, by his pain and suffering, he seized an axe, and, laying it on his leg, ordered an attendant to strike with a mallet until the limb was severed from the body — but mortification and death ensued, as might have been expected, from this rough proceedure. How great the contrast at the present day, when the poorest man in community can secure services, which all the riches of the Emperor of Austria could not command a few centuries ago, and the life of the peasant is now saved, when once the monarch had to be sacrificed. Facts like these, speak in a mighty voice in favor of the improvements of modern science, and call upon us, in a tone which we cannot misunderstand, to use every means in our power to promote its advancement.

The progress of science is steadily onward; prejudice may object, ignorance may oppose, and empiricism, in all its varied forms, may throw out its delusions to ensnare the unwary, but in spite of all, true science, powerful in its armor of truthfulness and right, will continue to win its way to the confidence and affections of man, while every obstacle which is placed in its way, shall be overthrown by its progressive power, as the feeble barrier of sand is swept away by the onward current of the mighty river.

[H.]

NITRIC ACID AS AN ANTIPERIODIC.

BY GEORGE MENDENHALL, M. D., OF CINCINNATI.

I propose, in the present brief paper, to bring before the Society, for its consideration, a new application of a remedy which has long been in use by the profession. It is that of Nitric Acid in the treatment of disease, when periodicity is the prominent symptom.

At present, Cinchona, and its preparations, appear to be almost the only remedies that have the confidence of the profession in general practice. Whether the present remedy proposed will be able to acquire a permanent reputation is yet to be decided. The testimony in its favor, seems to me, at least, to entitle it to a fair trial. By subjecting it to the refining process in the crucible of professional experience, its true value may be established. If the remedy is found to possess no properties but what have long been known, it will only add another to the list of articles, the properties of which have been mistaken by a professional brother. On the other hand, if the action attributed to it is found to be uniform, then a valuable agent will have been added to our means of treating intermittent diseases, which will possess several advantages over quinine and kindred preparations.

The facts upon which this paper is based, are taken, mainly, from an Inaugural Dissertation, presented to the Faculty and Trustees of the Miami Medical College, for the Degree of Doctor of Medicine, by E. T. Baily, M. D., of Emmettsville, Indiana.

He states, that in the section of country in which he resides, there is a large portion of marshy land, and, therefore, the circumstances are favorable to the development of autumnal fevers.

His attention was first attracted to the use of Nitric Acid, in the treatment of Intermittent Fevers, by noticing its effect in a case of chronic intermittent, which was attended by profuse night sweats, and for which complication he administered this remedy. In this case, there had been daily paroxysms for the preceeding five days; night sweats profuse, the tongue coated, and the bowels constipated. Nitric acid was given in doses of six drops, diluted with water, in the evening; and he was greatly surprised to find that the paroxysms did not return on the following day; and this circumstance induced him to try its effects in other cases as an antiperiodic.

Since that time, he has treated over ninety cases of intermittent fever, with this article, with remarkable success. Of this number, all recovered promptly except ten; and in every one of these unsuccessful cases, the remedy was discontinued contrary to directions.

Fifteen, of the whole number, were of the tertian type, and seventy-five of the quotidian.

In fifty cases there was no return of the chill after commencing the use of the acid. The others were rarely attended by more than one paroxysm, and in no case by a third. When a patient had a paroxysm, after taking the medicine, it was in every case diminished in intensity and duration.

In Dr. Bailey's practice, this remedy has entirely superceded every other article, for the purpose of interrupting the paroxysms of intermittents. His mode of proceeding, is to give from five to eight drops of the commercial nitric acid, properly diluted, once in six hours, without regard to intermission or exacerbations. Cathartics and alteratives, may be necessary, for the purpose of changing certain conditions of the system, but so far as the interruption of the paroxysm is concerned, the acid may be given without any preparation of the system whatever, if we choose to do so.

The following cases are selected, from among many others, in order to show the different varieties of the disease, and the mode of treatment pursued.

Case 1st. Mr. S. S., aged 55, of temperate habits, called upon him on the 12th of July, 1852. In May, previous, he was attacked with intermittent fever, which was cured by quinine, but relapsed in six weeks, since which, the disease has continued with daily paroxysms. The tongue was furred and the bowels constipated. A purgative of calomel and rhubarb was ordered at bed time. A violent fever followed

the chill, which occurred at eleven o'clock, A. M., of this day. Five drops of nitric acid was directed to be taken every six hours, diluted so as to make a pleasant drink, to be commenced on the following morning, at six o'clock, the 13th. The calomel and rhubarb produced two copious operations from the bowels, prior to commencing the nitric acid. Three hours after the exhibition of the remedy, at six o'olock, as directed,, a chill came on followed by a high fever. The medicine was continued through the day.

July, 14th. The patient is free from a paroxysm; no fever; the tongue clean and moist; and the medicine was directed to be continued as before.

July 15th. The tongue improving; bowels regular; and the pulse very little excited; no chill — medicine continued.

July 16th. The patient has entirely recovered.

Forty-five drops only were taken in this case, as the medicine was not given at night.

Case 2d. On the 10th of September, 1852, was called to see Master A. L., aged 6 years; he has had intermittent fever since the 6th instant, with daily paroxysms, followed by high fever. The tongue was moist, and the bowels open. Four drops of the acid were ordered, which were diluted as before, so as to be easily taken; one dose to be given at 12 o'clock, and the second, at 6, the following morning, and repeated at 12 o'clock.

September 11th. Visited the patient in the afternoon; he had not had any chill; the tongue was clean, and skin moist, with no excitement of the pulse—discharged cured. In this case, the medicine was discontinued, to see whether the effect would be permanent.

September 12th. No return of the paroxysm. Sixteen drops were taken in this case.

Case 3d. September, 20th 1853. Saw Miss D. N.; aged 28. Three days ago she was attacked with intermittent fever; the paroxysms of which commenced at 10 o'clock every day, and the chill was followed by a high fever. A mild purgative was ordered at bed-time; and sixty drops of nitric acid were diluted with two ounces of water, and directed to be taken in nine doses, at the rate of three doses per day, commencing on the morning of the 21st.

September 25th. Saw the patient to-day, and found that there had been no return of the paroxysm for three days. In this case sixty drops were taken.

Several other cases are reported with the same result; but it is not necessary to repeat them here.

It is stated that relapses seldom occur; much less frequently, than after the use of quinine, but upon this point more precision is required. It has been administered in all the various forms of intermittent fever which were presented to the author of the essay, and no unpleasant effects were observed in any case.

So far as my own experience is concerned, I can say but little. In three cases, however, of imperfectly developed intermittent fever, in which I have used the remedy, its action has been uniformly favorable, and in all these cases, the paroxysms were promptly prevented.

Some of my friends report, that they have also used the remedy with uniform success.

I will repeat, that these observations are thrown to the profession, for the purpose of eliciting the results of its experience, and not to claim the remedy as a specific, the power of which is well settled. Should these observations be verified by the experience of others, this remedy will be found to be a valuable agent, and to possess the following advantages:

1st. Certainty as an antiperiodic.

2d. The power of invigorating the general system, while at the same time, it has alterant properties.

3d. Facility of exhibition, being much easier taken than quinine, barks, &c.

4th. Freedom from unpleasant effects which sometimes follow these remedies.

5th. Cheapness of the article, which is often of considerable importance in miasmatic regions.

[J.]

ÆTIOLOGY AND CURABILITY OF PHTHISIS PULMONALIS.

BY C. G. COMEGYS, M. D., OF CINCINNATI.

MR. PRESIDENT:

I propose, on the present occasion, to consider, briefly, the Ætiology and Curability of Phthisis Pulmonalis.

This disease, whose ravages are so frightful, has been ranked amongst the *opprobria medicina*. There are many in our profession who consider a tuburculous diathesis incurable; but there is a growing idea that its successful treatment is possible. Society has never given up this hope; and although confidence, to a great extent, may have been lost in its cure, by the regular profession, they still cling to the probability of it, and freely patronize any man who assumes its successful treatment.

Ætiology.—If, in regard to method, the medical sciences are in general too much in the rear of other natural sciences, it is to ætiology, more than to any other department of pathology, that the reproach is applicable. The lack of patient and intense research for the elimenation of important questions relating to the origin of disease, has been the natural source of great errors in pathological doctrines, and strange hypotheses in therapeutics. So great has been the confusion in this branch, that the question is now often asked, if, in the present state of science, there is any ætiology; and, says one, after we have set aside some of the most palpable causes, such as an infectious coition in the production of syphilis; the presence of a vegetable parasite in tinea capitis; the sarcopt in itch; and some others that might be named, there are few elements of certainty as to the causes of disease. I must therefore be excused if I do not take up your time in the discussion

of all of the prominent theories that have been proposed in this department of my subject.

The obvious causes of Phthisis seem to be generally conceded; they are such as relate to the general circumstances under which the subjects of it are placed; but when we carry our investigations farther, the question becomes much more difficult of solution.

1st. *Climate.*—Phthisis Pulmonalis is now known to be a common disease in all civilized nations, and the remark may be extended, almost as fully, to embrace the people, whether savage or civilized, in all parts of the habitable globe; but it does not prevail to the same extent in all countries; and the most secure residences seem to be those so far north as to escape the greatest vicissitudes in the seasons. Thus, in Stockholm, the deaths from this disease only amount to one-fifteenth of all; while in London, Paris and Berlin, they amount almost to one-fifth. In some of the German cities the proportion is also much larger than in St. Petersburgh. Many writers still hold out the idea that warm climates are comparatively exempt from this disease; but since statistical research has been made, the deaths from Phthisis have been found to be almost as common as in higher latitudes. Thus, for the eastern continent, the rate is almost as great at Rome, Naples, Madrid, Lisbon, Marseilles, Malta, the Ionian Isles and the North of Africa, as it is in England.

From the researches made on our own continent, the same result is established; in fact, according to the statistics, collected by the late Professor Drake, from the reports of the British army, and the sanitary publications of some of the cities on our seaboard, the proportion of deaths from Phthisis is greater in the south than in the north. I make this statement from the recollection of a paper, read by that lamented man, before the Cincinnati Medical Library Association; the details, full of interest, as they are, will be published, I presume, in the forthcoming second volume of his great work. These statistics relate to the West Indies, as well as the British possessions farther north. Statistics collected in Brazil and Martinique, by Doctors, Rufz, Jobins and Sigaud, show that it is as murderous in those places as in Europe or North America. We have not yet attained that eminence in civilization in our Union to enable us to show, from authorized statistics, what are the facts on this subject.

2. *Age.*—In a general way, it may be said that no period of life is exempt from Phthisis. Tubercles are not only found developed in the

earliest months of extra uterine life, but also in the fœtus itself; on the other hand, old men are frequently its victims. Good observers make out about the following result of its frequency at different periods of life; that is to say, nearly the same for each of the years of infancy, nearly stationary towards puberty, but very destructive towards the 20th year. According to Sir James Clark, it attains its maximum about the 30th year, and then gradually falls off.

The statistics of some of the European cities show as follows:

Greatest frequency	from the	20th to the	30th year.
next,		30th do	40th,
do		10th do	20th,
do		50th do	60th,
do		0 do	10th,
do		60th do	70th.

3d. *Inheritance*—This has been supposed the greatest of all the causes of this fell disease; but statistical knowledge very much brings it into question, and I especially invite the attention of the profession to this point; for one of the greatest triumphs of our art will consist in rescuing, from an early grave, the progeny of those unfortunate marriages of persons of a tuberculous diathesis, that are constantly witnessed in society. We cannot, with scientific barriers, arrest the flow of the fervent stream of love. Science can never effectually cross love; and must therefore offer its security, as far as possible, to its products; this will exalt her.

We have, here, I repeat, one of the gravest and most important questions in the ætiology of tubercles, and in nothing is there more difficulty in collecting facts. For example, an individual may contract a disease of which his father or mother were attacked under very varied circumstances. Before deciding, therefore, whether it is a simple coincidence or a correllation from cause to effect, we must first be assured if either of the parents have had it; again, whether it was developed before or after the pro-creation; and further, whether the disease in the parents was accidental, or a predisposition. I mention these points for the purpose of showing how careful the statist must be in his researches, and what doubts may hang over the inheritance of the disease.

The hereditary nature of the disease is well established, but it is very difficut to fix on its rate of frequency, as above intimated; though the children of tubercular parents are not necessarily subjects of the

disease, yet it must be confessed that a great number of them are, sooner or later, carried off by the malady. The following statistics I obtain from Dr. Lebert's work on tuburculous and scrofulous diseases. He gives the result of his observations in 132 diseased families, and shows that in 87 of these, or two-thirds, no hereditary influences could be traced. Others show, and the experience of some of us may also confirm it, that entire families of children may be swept off by a tuberculous or scrofulous disease and neither of the parents nor their ancesters have been affected. Death from Phthisis, as an inherited disease, is the exception and not the rule. Louis shows, that in only about one-tenth of the cases in his practice, could he trace it to inheritance; Piorry in about one-twenty-third; Rilliet and Barthez in one seventh.

For fear of tediousness I will hastily enumerate other causes to which the disease is usually ascribed.

The predisposition of the sexes seems to vary according to locality; thus, while in Paris, and in England at large, there is a predominance in females; in London, Geneva and Prague there is a small excess in males.

There is nothing in what may be termed the temperament of individuals that proves the tendency to tubercles, and a predisposition owing to constitutional states is, in the present state of the knowledge, doubtful.

A single bad hygienic condition cannot be regarded as sufficient to provoke tubercles; it is only an association of several conditions that exerts a real influence. Neither will the most favorable external hygienic circumstances prevent their development.

The influence of the seasons, on the production of tuburcles, has been exaggerated more by hypothesis than by observation.

The special influence of professions or occupations, has not been well established; and its development, as an effect of thoracic inflammations, though asserted by many authors, seems not to be borne out by careful observations; and the assumption that it occurs, in many cases, from a modified Syphilis, and transmitted as such, from parents to children, is an hypothesis purely gratuitous. I might enumerate veneral excesses, and masturbation; and, as occasional causes, blows on the chest; the sudden application of cold; the influence of dust or gasses; the use of corsets; intermittent and other fevers; great efforts of the voice; and, lastly, contagion; and show from good authorities that to none of these can we ascribe the

evolution of tuburcles. Briquet says, that in four-fifths of his cases he could find no occasional cause.

Having thus ran over the inquiry as to the causes of tuburcular development, connected with the principal circumstances under which the subjects of it are placed, or the temperaments which they present, I proceed to consider those circumstances which are less obvious, and for the purpose of fairly reaching these points, will offer the opinions of some well known men.

Andral considers tubercles as nothing else than a secretion of matter, which seems to be produced indifferently, either in the last bronchi, or in the vessels that succeed them; or in the cellular tissue interposed between them; or in the intercelular tissue. This matter, which seems to be primarily liquid, becomes solidified at a period more or less remote from that at which it was secreted, and becomes a tubercle. (Med. Clin. Vol. 2, p. 212.) Carswell, whose views are adopted by Watson, considers tubercular matter a secretion *sui generis*, totally destitute of organization, and as effete matter continually separated from the blood, when that fluid is in an unhealthy state, and thrown out chiefly on the free surface of mucous membranes, and producing bad consequences only as it accumulates in the organs; impeding their functions, and acting upon them as foreign matter. Nothing of all this can be detected in the blood.

Williams, instead of classifying tubercles under the vague head of accidental productions or secretions *sui generis*; says, "I have for many years referred tubercles to a degraded condition of the nutritive material from which old textures are renewed and new ones formed; and that it differs from fibrin and coagulable lymph, not in kind, *but in degree* of vitality and capacity for organization."

Dr. J. Hughes Bennett says: "From a study of the symptoms, causes, morbid anatomy and histrology of phthisis pulmonalis, I am led to conclude that it is a disease of primary digestion, causing: 1st, impoverishment of the blood; 2d, local exudations in the lungs, which present the characters of tubercular exudation; and 3d, owing to the successive formation and softening of these, and the ulcerations which follow in the pulmonary and other tissues, the destructive results which distinguish it. Further observation shows, that circumstances which secure the well assimilation of food, frequently check further tubercular exudations, whilst those which primarily existed become abortive; and that occasionally, more extensive excavations in the pulmonary tissue, may, owing to like circumstances, heal up and cicatrize."

Carpenter, in his considerations on nutrition, (p. 572,) after alluding to the state of the blood, says: "Such a constant deficiency of plasticity must affect the ordinary nutritive process; and, that there will be a liability to the deposit of cacoplastic products, instead of the normal elements of tissue. Such," he adds, "appears to be the history of the formation of tubercles in the lungs and other organs, when it occurs as a kind of metamorphosis of the ordinary nutritive process, and in this manner, may proceed insidiously for a long time, so that a large part of the tissue of the lungs shall be replaced by a tubercular deposit, without any other ostensible sign than difficulty of breathing."

Dr. Matthew Troy, of Whiteville, N. C., says (Am. Journal of Med. Science, 1852, p. 107,) I consider tubercle to be the solid matter of the cutaneous excretion, especially of the sebacious follicles. This secretion, not being expelled by the natural emunctory, is retained in the blood, and in the effort of nature to eliminate it through an unnatural channel, it is deposited in some other excretory organ, where its fluid matter being absorbed, it becomes tubercle. Everything, then, that depresses the action of the skin tends to the production of tubercles. Then he enumerates congenital malformation of the secretory glands, as synonymous with hereditary influence. All diseases, he adds, attended with a great disturbance of the function of the skin, are notorious for the production of phthisis. He concludes by saying, enough is known to show a very strong probability of the identity of the sebacious secretion and tubercles! This whole view is purely hypothetical, and is only offered because it is indiginous.

I propose to base the ætiology of phthisis pulmonalis and the tubercular diathesis, upon the imperfect digestion and elaboration of the elements of the food, and show that the number of cases that may be successfully treated, and the diatheses that may be combatted, will depend largely upon the period at which the treatment is commenced, and the amount of control obtained in the direction of the functions of digestion and assimilation, and the control of the external conditions that surround our patients.

The blood is the great stream from which is drawn the material for the nutrition of the tissues; and though we may not assert the precise vital acts that occur in the process of the metamorphosis of tissues — the manner in which the effete and wornout structure is replaced by a new and living element; yet we may assert, that it is on the perfection of this intimate and ultimate change, that depends the health and

continuation of tissues; and that it depends also upon the condition of the nutritive pabulum, which may be aplastic or wholly unfit for organization, or caco-plastic or imperfectly fitted for that act. Another view, however, may be assumed, and that is, that the failure in a perfect organization may not depend upon any lack of perfection in the pabulum; but in the deterioration of cell-life, through the elaboration of which tissues are evolved, and, it may be said, all the ultimate changes in organic life take place. This view, would reverse my position. While it is true that cell procreation has its limits, and that sooner or later, however perfect may be the pabulum, the vital powers must cease, owing to the completion of the cycle of their existence, yet it is safe to assume the former proposition, from several logical inferences. I will here remark, that some have asserted that the early deaths of those afflicted with phthisis, was entirely natural, for they had lived the utmost limit to which an inferior cell-life could carry them.

There are those who have this disease, in whom there are such extensive organic lesions in the whole alimentary canal that we could not hesitate to decide that, both the progress of the disease, and its fatal termination, were dependent upon the impossibility of digestion. But there are many cases in which no anatomical lesion is demonstrable, and, moreover, in whom the appetite is excellent, and the ordinary digestion well performed, so far as the absence of dyspepsia would indicate, and the general condition of the fecal discharges. In these, the food is taken in proper quantity, yet the progress of decay and emaciation progresses.

I shall not pause to consider the grosser forms of digestion, the conversion of starch into sugar, by the salivary fluid; the solution of albuminous matter by the gastric juice, and their absorption by the sanguiferous capillaries of the mucous membrane of the stomach and bowels; nor the emulsion of the oleaginous material by the pancreatic juice, and its lacteal absorption: but simply say, that these materials must undergo other changes, particularly the albuminous, before they are ready for appropriation by the economy. The solution in the alimentary tube may have been perfect enough, and the absorption complete, but the albuminous material is yet in too crude a condition for the wants of the system.

More recent researches, particularly those of the distinguished Bernard, show that the liver, instead of being a mere depurating organ,

as formerly supposed, has a further great office, viz: the assimilation of the nitrogenized elements of the blood in the portal circle, so that they may be prepared to enter the systemic circulation, and subserve the nutrition of the tissues; and, a further elaboration of saccharine elements so that they may be more subservient to the production of animal heat. It will be recollected, that all the veins which collect the blood from the gastro-intestinal surface, converge so as to form the portal vein, which is again ramified through the liver. The blood which reaches the liver from the alimentary canal is charged with albuminous matter, in a state very different from that which is found in the general circulation, and the assimilation of this would appear to be, from Bernard's experiments, one of the most important functions of the liver. The albuminous substance thus absorbed, as the product of the first stage of primary digestion, is called by Mialhe *albuminose*, and differs from true albumen in not being precipitated by heat or nitric acid, though it reacts like albumen with the metalic salts, tannin, and creasote. In short, he assumes that this albumen is in its crudest stage, and that it is elevated into pure albumen by the agency of the liver. But the functions of the liver are not limited to these acts: it converts all forms of saccharine matter, derived from the food, into *liver sugar*—the form most favorable to oxidation, and of which the blood is most tolerant—it has also power to convert proteine compounds, or certain products of their decomposition, into liver sugar; it exercises a similar transforming power upon *fatty matter*, generating the peculiar *liver fat*, either from oleaginous or from saccharine substances supplied by food, or from proteine compounds, or the products of the early stages of their retrograde metamorphosis. Bernard also states, that the quantity of fibrin is relatively so much greater in the blood of the hepatic vein than in the portal vein, that the conversion of albumen into fibrin must be assumed as one of its functions. He asserts, also, its powers in developing red-blood corpuscles. At the risk of being tedious, I have thus run over the functions of the liver, and shown how necessary all its normal acts are to a proper assimilation of the food. Although I have only time to say a word of the functions of the absorbent system, in its assimilative action on the nutritious fluid, yet it must be regarded as equalling in importance what I have said of the portal system. In fact, it is conceded by all physiologists, that the plasticity of the blood is due largely to the elaboration of the fluid poured into its current from the lacteral and lymphatic systems.

It is not difficult to know the disposition of the nutritive material ingested by those whose external digestive apparatus is extensively deranged by anatomical lesions—such unfortunates are rapidly carried off by the exhausting diarrheas that are seen in their cases. But in those patients who eat freely, and with good appetite, who have no disorder of the bowels — what becomes of the material they digest? It is not seen in the development of tissue, or in the supply of combustible matter for the maintenance of animal heat—for emaciation progresses and hectic fever is daily lighted up. I answer: the old physiological law holds good — not all that is digested is appropriated — and modern science enables us to say, that in our patients, in whom there is a mal-assimulation of the materials dissolved and absorbed by the alimentary canal, the kidneys act chiefly as emunctories to eliminate it from the system. We must search for it then in the products of the urinary secretion.*

Dr. Golding Bird, in his admirable work says: "Recent and very extended researches have convinced me that the indications afforded by the character of the quantity of solid elements of urine excreted by the kidneys, in a given time, are of the highest importance, not only as an exponent of functional leisure, but as a most important guide to the treatment of diseases." * * "Any means by which we can, with tolerable accuracy, appreciate the quantity of solids, or real urine, excreted in a given time, will enable us to know, not only to what extent the kidneys are performing their great and important function of depuration; but, also, to obtain data, by which it would be possible to measure, within certain limits, not only the amount of nourishment required from ingesta, but of the rapidity of the destruction of the effete tissues of the body, under the influence of the oxygen of the arterial blood. In this manner we may recognize the existence of a series of causes influencing the condition of our patients, the detection of which would otherwise have been scarcely possible."

We must look, then, largely to the amount of urea, and other constituents of the urine for the mal-assimilated food. It is well known that the urine is richer in its constituents after the digestion of food, than at any other time; hence, to ascertain the real work of excretion of old and effete tissues going on in the economy, we must examine the *urina sanguinis*, and not the *urina chyli*. Lehman found, in

*This remark is intended to apply to the *earliest stage* of the disease; at a later period, a large amount of waste of material occurs in the purulent expectoration.

experiments upon himself, that thus urea was increased from 255 grains, the usual standard, to 824, after the ingestion of a large amount of nitrogenized food, which shows an amount of nutritious material, unappropriated, of nearly 600 grains.

I have thus endeavored to bring forward the evidence furnished by the progress of medical science, in the knowledge of digestion and assimilation, to establish the general proposition, advanced long since by authors, that the Ætiology of Phthisis, must be sought in the mal-digestion and assimilation of the elements of the food.

I have, thus far, overlooked any special study of the state of the blood in persons affected with Phthisis, and of the tubercular material that is developed in the organs; nor will my limits allow me to say more, than that the blood is impoverished in red corpuscles, and lower in the vital properties of its fibrin; thus showing its unfitness as a pabulum for the healthful nutrition of the general cell-life of the organs. As regards the tubercular matter, it contains C. H. N. O.; also, in a crude state, fibrin, albumen, and gelatin. Notwithstanding all the efforts of Chemistry, science is much in the dark on the value of its chemical constitution. Nothing specific has been found, the substance presenting itself in the common combinations of proteine thus indicating its origin.

Of the symptoms, I will only allude to one—*Hectic Fever*. It is intermittent, as a general rule, in its character. It is early manifested, and becomes more marked towards the close of the case. Usually it is preceded by a chill or shivering.

The development of hectic fever, I assume, is in the inverse ratio of the appropriation of calorifacient ingesta; that is to say, when a patient derives from ingesta sufficient combustible matter for the maintenance of the animal heat, at the normal standard, there will be no exacerbation of the fever; but when the combustible ingesta is insufficient, the fever will be lighted up, and its violence and duration will depend upon the extent to which the combustion of the adipose material, laid up by the system in better days, is carried on. I insist, therefore, that hectic fever is the product of the combustion of the adipose tissue, the act of the vital forces for the development of animal heat—though this reaction is no more in this case, than in other exhibitions of the vis naturæ — limited, strictly, to the necessity of the case. I need hardly allude to the fact, that almost five-sevenths of all the food we ingest is for combustion, or the maintenance of animal heat, the balance

being sufficient for histogenetic purposes, or the replacing of what is effete and worn out in the system. This combustible material is ranked under the oleaginous and saccharine group.

We may, then, I repeat, measure the extent of supplies of combustibles obtained from external sources, by the development of hectic fever. Rapid emaciation of adipose tissue results from its daily exacerbations. The same general views of this fever are applicable to all conditions of the system in which it is manifested.

With the pathological views I have set forth, it is evident that the therapeutical indications will be fulfilled in the correction of the deranged digestive and assimilative functions, and the use of appropriate food under the most favorable external conditions.

To succeed in our efforts to arrest the development of tubercles, we need as much control over the subjects of it, as the Autocrat of Russia has over his people, and our resources of material supplies should be as unlimited.

I shall not pause to delineate a course of treatment, but say of medicines, those which will maintain a normal condition of the portal circle; of food, that which is most easily digested and assimilated, with a large preponderance of the calorifacient, particularly the oleaginous and alcoholic.

That Phthisis Pulmonalis is curable is rendered every day more certain; nearly all authors assert it, and almost every practitioner can point to cases in which he has arrested it.

"Why, then, the immense mortality, if it is curable?" thousands ask. Can we make pure air; can we ventilate a city or its miserable tenements; can we change employments; can we transport from one climate to another; provide good clothing, proper food, and plenty of fuel for comfort and health? Can we compel the people to seek the resources of our art at an early period?

It demands of us, as practitioners, skill in diagnosis, to detect its *earliest* appearances; skill in dietetics and hygiene; skill in the observation of the products of the vital chemistry; skill, in short, in the detection of the deranged functions of organs, and in directing a just medication for their relief.

In turn, we demand of society, to consult us in the direction of public hygiene—the ventilation of cities; the proper construction of houses and work-shops; the duration of daily toil; provisions for public cleanliness; the regulation of the exposure of food offered in

public markets; in short, in every thing that belongs to public and private health, so far as an advanced civilization makes it consistent with municipal regulation.

And now, in conclusion, I assert that Phthisis Pulmonalis, with our limited resources, is constantly being arrested in cases where it has made extensive progress; and, that it is as curable as other grave diseases, if it is early and fully recognized with resources at our command, to put in execution whatever therapeutic or hygienic measures an enlightened knowledge of our science may suggest.

[K.]

PATHOLOGY, SYMPOMATOLOGY, &C., OF LATENT PNEUMONIA.

BY SAMUEL G. ARMOR, M. D., OF CINCINNATI.

On another occasion, I published some views on the subject of my present paper. Further observation having satisfied me of their correctness. and of the frequent occurrence of this form of lung disease, especially in the malarious districts of the West, I shall ask the indulgence of the Society, while I briefly present some of the leading characteristics of what has been termed "*Latent Pneumonia*," hoping that I may succeed, at least, in directing attention to a not unfrequent form of pneumonia, which, on account of its obscurity, I fear, is too often undetected in its early stage.

Pneumonia has been divided, by authors, into the acute, chronic, and typhoid forms. Of these ordinary varieties, it is not my purpose to speak at present. The symptoms of the first, both physical and rational, are well understood, and the indications of treatment plain. The same may be affirmed of the second variety, with the addition that more care is required in physical explorations, and more caution in the administration of remedies. The last, namely, typhoid pneumonia, is usually the sequence of some other disorder, and when associated, as it frequently is, with some prevailing epidemic, or a broken down condition of the vital forces prior to the development of the pneumonia, it becomes one of the most dangerous complications. The constitution, already suffering from the depressing effects of an epidemic poison, soon yields to the arrest of a function so important to life as that of the lungs.

I have alluded to three of the most common varieties of pneumonia for the purpose of distinctly presenting a *fourth*, differing in many important respects from those enumerated.

It has been called *Latent* Pneumonia, because, in its early stages, none of the more prominent symptoms are present. Its approaches are silent, gradual, and frequently unobserved by either patient or physician until the work of destruction is accomplished. The ordinary functional signs of acute inflammation are, in a great measure, absent. The constitutional disturbance may be, indeed, so inconsiderable that the patient can pursue his usual avocations, or, if complaint be made, it is probably treated as a common catarrh. And yet, while resting in fancied security, disease may be doing its quiet but dreadful work. The disease is often scarcely suspected, and not often recognized, unless the obscurity of the general symptoms leads the physician to explore the chest. The subjective symptoms of an ordinary pneumonia are all masked.

If the disease has made considerable progress, on being *interrogated*, the patient may complain of a troublesome but not painful cough, with a somewhat viscid and scanty expectoration; the tongue moist and slightly furred; appetite unimpaired; respiration hurried; inability to take exercise; and, previously to *hectic* symptoms, there will be found a marked disparity *between the respiration and the circulation.*

Unlike the more active forms of pneumonia, the circulation will also be found frequently feeble; the pulse neither quick nor remarkably frequent; the capillary circulation languid, as evinced by the dusky appearance of the face, and the purple tint of the nails; and the general heat of surface not so great as in frank pneumonia. When occurring during the fall and winter months, it is frequently known by the vague term of "*Winter Fever*," and, if undetected in its earlier stages, it often proves to be a lingering and unmanageable fever.

We are indebted to Dr. O'Reilly, of the Royal College of Surgeons in Ireland, for some valuable facts in relation to the *seat* of difficulty, as a point of diagnosis, between latent pneumonia and phthisis. Thus, while the upper portion of the left lung is the ordinary seat of tubercular deposit, its *inferior* portion is generally the seat of latent pneumonia. In this respect it differs also from acute pneumonia, the inferior portion of the *right* lung being the usual and primary seat of inflammations in this variety. In phthisis, the tubercular deposit proceeds from above downwards; in latent pneumonia, the disease extends

from below upwards. Like ordinary pneumonia, however, the membrane lining the *air cells* is the seat of the inflammation, and, like it, the inflammation may *originate* in the vesicular structure and subsequently involve the large tubes; but, unlike it, the inflammation does not occasionally commence as a bronchitis, and gradually extend to the smaller tubes and air vesicles. Complications of this kind are usually attended with a higher state of sthenic excitement than is found in Latent Pneumonia.

It will be understood, however, that I speak of *general* laws; the exception as to the seat of difficulty and other modifying influences applying to this as to all other forms of pneumonia.

The causes which produce Latent Pneumonia are such as give rise to protracted conjestion of the lungs; and hence it is, that that form of pneumonia often prevails in malarious districts of the Western States. The cold stage of malarious fevers produces, in a high degree, the marks of intropulsive conjestion. Whatever may be the varied speculations as to the nature and essence of the malarious poison, and its mode of operating upon the human system, it must be conceded that conjestion of all the internal organs is one of the most formidable elements of disease against which we have to contend. If this be repeated and protracted, the capacity and tone of the blood vessels will be impaired, congestion will not, therefore, cease after the subsidence of the chill, and the result is a slow, insidious and latent form of inflammation.

Wtihout stopping to review all the exciting causes of inflammation, we will sum up, by remarking that they may be all divided into two classes: 1, those that cause determination of blood; 2, those that produce congestion. In the one instance, *irritation*, followed by determination, becomes the primary element of disease. In the other, *congestion and atony of the blood vessels* become the primary element, and irritation is secondarily set up. In Latent Pneumonia *congestion always predominates over the determination of blood.* Hence its marked asthenic character. All the symptoms are less prominent than the active or sthenic variety. There is little or no pain; fever and other signs of increased action are comparatively slight; nor does it tend to such speedy results as the acute variety. For this reason, the physician should be constantly on the alert that he may detect, in its earliest stages, a disease so formidable in character when fully developed.

Latent Pneumonia offers no exception to the three stages, with their relations one to the other, as they occur in the more frank variety, although, as has been remarked, they do not take place with the same rapidity, nor are their symptoms so prominent. In one respect, however, the auscultatory signs differ in this, that the true crepitant rale, so constantly present in the stage of engorgement of an active pneumonia, and even heard in the local or globular variety, is rarely detected; and, if heard at all, it is as a muco-crepitant rale.

Again, *gangrene* of the lungs, which may occur as a primary or secondary affection, is an occasional termination of this variety; especially if occurring in connection with an altered condition of the blood, which is incapable of supporting the vitality of the parts, and which is usually indicated by the early symptoms of depression.

For obvious reasons, derangement of the liver, followed by jaundice, is not an unfrequent complication of this form of pneumonia. Many of the cases already enumerated, especially intropulsive congestions, occasioned by malarious fevers, very readily produce diseased action of the Liver. In the first place the direct physiological relation existing between the lungs and liver as *excretory* organs, renders them liable to become complicated in diseased action. But if this relation did not exist, still pulmonary congestion, followed, as it always is, by distention of the right side of the heart, and by a direct *backward* action, produces venous congestion of the liver, with a consequent arrest of its secretion.

The *treatment* of this variety of pneumonia is attended with much difficulty, and a failure to recognize the disease, or a mistake in diagnosis as to its precise character, may be fatal to the patient. General blood-letting, upon which so much reliance is placed in the acute variety, is illy borne in this. I would, perhaps, better state the fact, by saying that it is *usually fatal*. Hundreds are, doubtless, annually sacrificed, in this low form of lung disease, to bleeding, antimonials, and the antiphlogistic regimen. Their tendency is to weaken the nutrition of the lungs, increase the passive hyperæmia of the blood vessels, depress the nervous system, and impoverish the blood.

In both the active and latent forms of pneumonia, dyspnœa will be, to a greater or less extent, present, and, in proportion to its presence, will there be repression of the pulse; but in one, the pulse will frequently rise as the blood flows; in the other, it will flag. In the one case the debility is *apparent;* in the other it is *real*. Hence the cau-

tion which has to be exercised in the use of all remedies which are calculated to depress the vital forces. Beef, tea and quinine are oftener indicated than blood-letting and antimony. The patient's strength must be supported; the local hyperæmia must be overcome; and although, to accomplish this, it may be necessary, in some cases, to abstract blood locally by means of cups, it may be equally necessary at the same moment, to husband the patient's strength by the administration of tonics. The great prominent fact should never be lost sight of, that Pneumonia occurs in this form solely under circumstances of general physical debility. Hence the treatment must be mainly directed to the state of the system generally.

An important element in the treatment of this form of pneumonia, is to guard against a complication of a Bronchitis. To accomplish this we should be careful to prevent the admission of cold air to the bronchial mucus membrane. Early and close attention to *uniform temperature* can not be too strongly urged.

In the more advanced stages, the moist, coarse rales are frequently heard over a large extent of surface. If, in connection with this physical symptom, the pulse be feeble, the skin dusky, cold and relaxed, we should lose no time in putting our patient on the use of some of the stimulating expectorants, and, perhaps, none equal in importance, the senega and sesqui-carbonate of ammonia. This combination appears to be peculiarly adapted to those cases in which the secretion into the tubes is considerable, and the patient expectorates with difficulty.

The sesqui-carbonate of ammonia, wine, barks, and the nutritous animal broths, well seasoned with the chloride of sodium, often exercised a marked control over the local disease.

There has been much difference of opinion as to the propriety of blistering the chest in the asthenic forms of pneumonia. My own experience justifies their application in the form of pneumonia which I have described; indeed, I regard their action as much more certain than in ordinary pneumonia, and their use may be resorted to much earlier. They should be frequently applied — applied small, and not allowed to remain until exhausting suppuration follows their application. Counter irritation, in the form of strong acetic acid and terpentine, is also an important remedy.

If a malarious influence can be detected, the paroxysm should be at once arrested. No element of disease could be more pernicious in its tendency. Any indications of periodicity, therefore, should be prompt-

ly met by the use of the *sulphate of quinine*. In malarious districts, the powers of this remedy are often singularly displayed in the treatment of this form of pneumonia.

It is not my purpose, however, to detail the *treatment* of Latent Pneumonia. A more important question relates to its *Pathology*. If this be right, we can scarcely err in the indications of cure. If it be wrong, the mistake will be almost necessarily fatal to the patient.

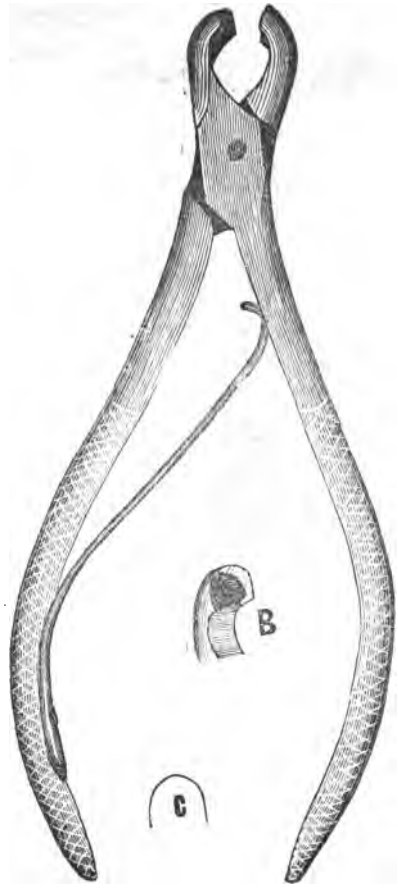
There are other forms of pneumonia, in many respects remarkably similar to the one I have described, and the importance of which it is difficult to exaggerate — I allude to pneumonia when occurring as a *secondary* or *intermittent disease* in typhus fever, phlebitis, puerperal fever, Bright's disease, rheumatism, &c. Hence, also, as in Latent Pneumonia, the inflammatory character of the local malady is modified by the general condition of the constitution.

DR. R. THOMPSON'S GOUGE BONE-CUTTING FORCEPS.

In the month of November, 1848, I invented this instrument, and have, since that time, used it, with great convenience and advantage, in that class of operations upon the bones which has, hitherto, required the use of the mallet and chisel, gouge, trephine, chain-saw, &c.

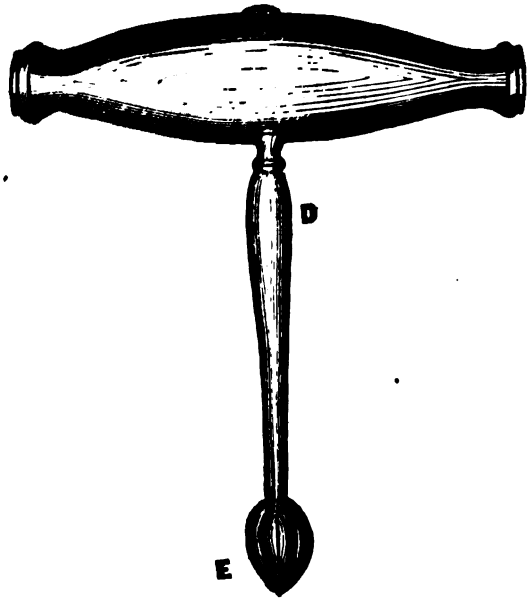
In regard to the application of the instrument, it is unnecessary to speak, while a view of it will assure any surgeon of the value of a bone-cutter, of such character as to be operated by a simple movement of the hand, without the infliction of the slightest jar to the patient. This instrument is used with equal facility upon flat and cylindrical bones.

In this sketch, the instrument is shown, with the cutting-bits thrown open by the re-acting spring. Its entire length should be about 6½ inches, and it should be very strong in its material and mechanism; with bit-edges to lie, when shut, as nearly as possible in *touching contact* without injuring the edges. For some purposes, it is convenient to have the bits set with an oblique bearing upon the handles.



B, shows a section of the jaw of the instrument; *C*, shows a direct view of the cutting edge of the bit, which may be varied, as to width, to suit the views of the surgeon.

D, represents a hand-drill or bone-perforator, which is a very useful instrument in many cases.



[M.]

REPORT OF THE OBITUARY COMMITTEE,

BY R. HILLS, M. D.

(Manuscript not received by Committee on Publication.)

CONSTITUTION.

ARTICLE I.

SEC. 1. This association shall be called the "OHIO STATE MEDICAL SOCIETY," and shall be composed of resident and honorary members.

ARTICLE II.

SEC. 1. The Society shall constantly have in view:

First, The association of the Profession, for the purpose of mutual recognition and fellowship;

Second, The maintenance of union, harmony and good government among its members, thereby promoting the character, interests, honor and usefulness of the profession;

Third, The cultivation and advancement of medical science and literature, and the elevation of the standard of professional education.

ARTICLE III.

SEC. 1. The resident members shall be regular practitioners of medicine or surgery, in the State of Ohio, who shall be elected by vote of a majority at any regular meeting, their eligibility having been previously reported upon by the committee on admissions. [*Amended, see page* 164.

ARTICLE IV.

SEC. 1. Honorary members shall only be admitted by a vote of two-thirds of the members present, at a regular meeting, having been first recommended by the committee on admissions. The whole number of honorary members shall not exceed one hundred.

ARTICLE V.

SEC. 1. A vote of two-thirds of the members present shall be requisite for the expulsion of a member, which vote shall be had in consequence of a report from the committee on ethics, and at the next regular meeting subsequent to such report.

ARTICLE VI.

SEC. 1. The officers of this Society shall be a President, four Vice Presidents, two Secretaries, a Treasurer, and Librarian, all of whom shall be elected annually, by ballot, and a majority vote, at the regular meeting. They shall severally perform the duties assigned in the by-laws, as shall also the standing committees.

ARTICLE VII.

SEC. 1. The following standing committees shall be annually appointed by the President, and shall each consist of five members: 1st, an Executive Committee; 2d, a Committee on Finance; 3d, on Publication; 4th, on Medical Ethics; 5th, on Medical Societies. A Standing Committee on Admissions, of like number, shall be elected by ballot, and a majority vote, at the same meeting, annually.

ARTICLE VIII.

SEC. 1. No part of this Constitution shall be repealed, annulled, altered or amended, except at a regular meeting, subsequent to one at which a proposition to that effect may have been made, in writing, and then only by a vote of four-fifths of all the members present.

BY-LAWS.

ARTICLE I.

MEETINGS.

SEC. 1. At all meetings the presence of fifteen resident members shall be necessary to constitute a quorum.

ARTICLE II.

OFFICERS.

SEC. 1. *The President* shall be elected annually, at the regular meeting in June, by nomination, ballot, and majority vote. He shall preside, enforce a due observance of the Constitution and By-Laws, see that all members of committees and officers perform their respective duties, appoint all committees not otherwise provided for, give the casting vote only, sign Diplomas and all other official documents requiring his signature, and perform such other duties as appertain to his office by usage and custom.

SEC. 2. *The Vice Presidents* shall assist the President in the performance of his duties. In his absence, shall preside in order of Seniority — rank being determined by the number of votes cast for each at his election — if the number of votes shall be equal, age shall confer precedence.

SEC. 3. *The Secretaries* shall keep the minutes of the proceedings of all meetings, notify officers, &c., of their appointments, and the duties required of them ; sign Diplomas, and certify to all official acts requiring the same ; receive the signatures and initiation fee of newly elected members, and do such other business as shall be required, or as the Society may, from time to time, direct in their department.

SEC. 4. *The Treasurer* shall receive all moneys due to the Society,

and pay all bills endorsed by the Finance Committee and countersigned by the President, keeping correct accounts of the same, and making a full and detailed report at the annual meeting in June.

SEC. 5. *The Librarian* shall have charge of all books, manuscripts, instruments, preparations and other scientific property belonging to the Society; shall keep a catalogue of the same, in the usual manner, and report upon the condition of his department to the annual meeting in June.

ARTICLE III.

STANDING COMMITTEES.

SEC. 1. *Standing Committees* shall keep regular minutes of their proceedings, and furnish an authenticated copy to be deposited with the Librarian.

SEC. 2. It shall be the duty of the *Committee on Admissions*, upon receiving the names of candidates for membership, to make due inquiry, and report such as may be found worthy to the Society, which may thereupon elect them. Should the Committee fail to report upon nominations submitted to them, any member having made such nomination, may renew the same directly to the Society, in which case a vote of four-fifths of the members present shall be requisite to constitute an election.

SEC. 3. *The Committee on Ethics* shall hear all complaints of breach of etiquette, or violation of Medical Ethics; it shall decide all questions of Ethics submitted to it. If any member shall be charged, in writing, with any violation of the provisions of the Constitution or By-Laws, or with unprofessional conduct, a copy of such charge shall be furnished to him, himself and his accuser cited to appear, when the Committee shall proceed to hear the case, reserving its decision to be reported to the Society, when its action may be affirmed by a vote of a majority of the members present.

SEC. 4. *The Committee on Finance* shall superintend the monetary affairs of the Society, inspect and audit all bills and the accounts of the Treasurer, and make such an assessment, by a pro rata tax upon the resident members, as may be necessary for incidental expenses; which, however, shall not exceed the sum of $100 per annum.

SEC. 1. *The Committee on Publication* shall superintend the printing of such papers as may be ordered to be published, so that they

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MEMBERS.

Ackley, H. A.	Cleveland.
Agard, A. H.	Western Star.
Albers, Wm.	Lancaster.
Allen, C. P.	Elyria.
Allen, Peter	Kinsman.
Ames, C. E.	Cleveland.
Angel, E.	Akron.
Amor, Saml. G.	Cleveland.
Ashmun, G. P.	Hudson.
Atwood, N.	Russelville.
Awl, Wm. M.	Columbus.
Austin, H.	Mansfield.
Adams, J. J.	Cincinnati.
Arons, John J.	Cincinnati.
Baker, A. H.	Cincinnati.
Baker, T. H.	Millbrook.
Ball, A.	Irville.
Beach, C. H.	Wellington.
Beaugrand, Pierre	Fremont.
Belding, Alvin	Ravenna.
Bell, Wm.	Xenia.
Bennett, A. J.	Bolivar.
Bigelow, A. D.	Cleveland.
Bigelow, J. M.	Lancaster.
Bing, J. P.	Ironton.
*Boalse, A. N.	Lockbourne.
Bœrstler, G. W.	Lancaster.
Bonner, Stephen	Cincinnati.
Boyle, C. E.	Columbus.
Bricker, R. W.	Shelby.
Briggs, Jas. M.	Caledonia.
Brinkerhoof, D. H.	Tippecanoe.
Brodbeck, C.	Dayton.
Bronson, Jas.	Newton Falls.
Brooks, Frank.	Hope.
Brown, E. T.	Logan.
Brown, M.	Circleville.
Bryan, E. F.	Granville.
Buckner, P. J.	Cincinnati.
Buckner, Wm.	Hamilton.
Burr, I. N.	Mt. Vernon.
*Butterfield, Jno.	Columbus.
Brown, T. B.	Batavia.
Brooks, J. H.	Bournville.
Brooks, J. W.	College Hill.
Card, G. W.	Painesville.
Carey, Abel	Salem.
Carey, H. G.	Dayton.
Carney, E.	Berkshire.
Carter, Francis	Columbus.
Cassels, J. Lang	Cleveland.
Catley, R. P.	Poseyville, Ind.
*Chamberlin E K	Cincinnati.
Chandler, S. R.	Duncan's Falls.
Chapman, W. B.	Cincinnati.
Clarke, W. T.	Central College.
Clements, Joshua	Dayton.
Cleveland, T. G.	Cleveland.
Cochran, M. B.	Delaware.
Cole, Joseph	Akron.
Collins, E. T.	South Charleston.
Collins, L.	Ravenna.
Comegys, C. G.	Cincinnati.
Conklin, H. S.	Sidney.
Conlan, Jno. I.	Cleveland.
Conner, P. S.	Cincinnati.
Converse, J. N.	Union City, Ind.
Cooke, F.	Atwater.
Coons, I. A.	Dayton.
Cotton, J. D.	Marietta.
Coulter, J. P.	Wooster.
Cox, D. A.	New Paris.
Crabbs, Jacob	Olivesburg.
Craighead, J. B.	Dayton.

Crook, James M.	Dayton.
Crook, Oliver	Dayton.
Crume, P. M.	Eaton.
Clendenin, Wm.	Cincinnati.
Carroll, Thos.	Cincinnati.
Chapman, C. B.	Cincinnati.
Carey, M. T.	Cincinnati.
*Dana, M.	Risden.
Davis, E. H.	New York.
Davis, John	Dayton.
Davis, O. E.	Lancaster.
Davis, S. B.	Lockbourne.
Davis, W. H.	Bellpoint.
Dawson, John	Columbus.
Dawson, J. R.	Bellbrook.
Dawson, W. W.	Cincinnati.
Delamater, J. J.	Cleveland.
Delamater, John	Cleveland.
Denig, Chas. E.	Columbus.
Denig, Robt. M.	Columbus.
Dille, A. L.	Mayfield.
Dolman, Wm.	Cleveland.
Dorsey, G. Volney	Piqua.
Dunlap, A.	Ripley.
Darst, H. H.	Tippecanoe.
Dunaho, H. J.	Sandusky.
Dorrington, Wm.	Cincinnati.
Davis, John	Cincinnati.
Dandridge, A. S.	Cincinnati.
Dodge, I. S.	Cincinnati.
Edwards, O. F.	Loudonville.
Edwards, Tom O.	Cincinnati.
Eels, G. E.	Lithopolis.
Effinger, M.	Lancaster.
Estep, Wm.	Lloydsville.
Fassett, Harry	Johnstown.
Ferguson, B. P.	Kirkinsville.
Field, E.	Frankfort.
Firestone, Leander	Congress.
Firor, S. V.	Tarlton.
Fischer, William	Lancaster.
Fisher, Alexander	Akron.
Fisher, D. A.	Baltimore.
Fisher, Elias	Lebanon.
Fisher, Sylvanus	Waynesville.
Foster, Henry C.	Springfield.
Foulke, L. W.	Chillicothe.
Fuller, S. W.	West Liberty.
Fyffe, E. P.	Urbana.
Foote, H. E.	Cincinnati.
Falkner, Cyrus	Hamilton.
Foster, Nathaniel	Cincinnati.
Gailey, J. D.	Marion.
*Gard, B. F.	Columbus.
Gard, I. N.	Greenville.
Garlick, Theo.	Youngstown.
Garst, M.	Dayton.
Gaston, E.	Morristown.
Gay, N.	Columbus.
Gilbert, I. K.	Tippecanoe.
Gille, L. C. C.	Westville.
Gillet, Berkley	Springfield.
Goble, P.	Worthington.
Goddard, J. W.	Urbana.
Gordon, P. A.	Cleveland.
Gordon, Thos. W.	Georgetown.
Green, D. K.	Xenia, Ill.
Green, J. N.	Bainbridge.
Green, J. W.	Fairfield.
Griswold, L. D.	Elyria.
Gabriel, R. W.	Dublin.
Gotwald, G. A.	Cincinnati.
Gholson, S. C.	Cincinnati.
Gerwe, F. A. J.	Cincinnati.
Haldeman, L.	Minerva.
Hamilton, J. W.	Columbus.
Hamilton, L. A.	Chardon.
Hamilton, Robert	Morristown.
Hammond, Jacob	
Harley, L. G.	Dalton.
Helmick, G. W.	Harrisburg.
Helmick, J.	Harrisburg.
Helmick, L.	Harrisburg.
Haines, Job	Dayton.
Hempstead, G. S. B	Portsmouth.
Hendershott, I.	Springfield.
Henderson, Jas. P.	Newville.
Hendren, W.	Delaware.
Hewitt, M. L.	Cleveland.
Hibberd, J. F.	San Francisco.
Hildreth, Chas. C.	Zanesville.
Hills, R.	Delaware.
Hoagland, C. N.	Tippecanoe.
Holston, J. G. F.	Zanesville.

Hopkins, Rudd C. Cleveland.
Hopple, Jas. C. Cincinnati.
Hornbeck, R. New Carlisle.
House, G. W. Harrisburg.
Houston, M. L. Jamestown.
Houston, Robt. South Charleston
Howard, E. W. Akron.
Howard, H. C. Columbus.
*Howard, R. L. Columbus.
Hubbard, N. W. Newark.
Huber, W. Hamilton.
Hudson, W. N. Denmark, Iowa.
Huestes, Isaac Chester Hill.
Hunt, S. P. Morrow.
Hurxthall, F. S. Massillon.
Harte, B. F. Harmar.
Hudson, Salmon Whittlesey.
Hyde, J. H. Deerfield.
Hendricks, L. A. Milford.
Hancock, A. Stillwell.
Ingram, John Savannah.
Johnson, William Delaware.
Johnston, Thos. B. Xenia.
Jones, T. W. So. Bloomfield.
Jones, W. W. Toledo.
Judkins, J. P. Cincinnati.
Judkins, William Cincinnati.
Judkins, David Cincinnati.
Johnson, R. H. Cincinnati.
James, S. N. Cincinnati.
Jones, A. Wilmington.
Kaufman, C. S. Cincinnati.
Kay, Isaac Springfield.
Keever, M. H. Ridgeville.
Kelley, Edwin Elyria.
Kirtland, J. P. Cleveland.
Knowlton, Jno. A. Franklin.
Koogler, Adam, Greenville.
Kreider, M. Z. Lancaster.
Kuhn, Henry Tiffin City.
Kable, W. R. Bellbrook.
Kellog, John M. Cincinnati.
Kyle, A. F. Walnut Hills.
Kenedy, J. C. Batavia.
Kincaid, W. P. Neville.
Lamme, W. H. Centreville.
Landon, C. P. Westerville.
Landon, G. W. H. Westerville.
Lane, E. S. Sandusky.
Langworthy, O. P. Reynoldsburg.
Lathorp, H. Columbus.
Lawson, L. M. Cincinnati.
Lewis, D. New Haven.
Lyman, C. N. Wadsworth.
Mack, H. O. Shelby.
Mack, John Shelby.
Maris, G. W. Columbus.
Marsh, N. B. Cincinnati.
Martin, Joshua Xenia.
Martin, Samuel Xenia.
Matchett, J. E. Castine.
McAroy, W. B. Franklin.
McCullough, T. P. Indianapolis.
McDonald, A. R. Kingston.
McFarland, J. A. Tiffin City.
*McGuire, W. B. Waynesville.
McHenry, W. Lima.
McIlhenny, J. J. Fairfield.
McKenzie, N. K.
McLaughlin, A. C. Tremont.
McLeon, R. G. Lockbourne.
McNally, Thos. Chillicothe.
McNeal, F. D. Canal Dover.
Merriman, And. Madison.
Metz, Abraham Rome.
Metzger, Geo. S. Columbus.
Millikin, Sam'l. Hamilton.
Miner, E. L. Lithopolis.
Mitchell, G. F. Mansfield.
Moore, W. C. Congress.
Moore, Jonas Marietta.
Morrison, J. Columbus.
Mosgrove, Adam Urbana.
Mosgrove, Jas. M. Urbana.
Mount, Wm. Cumminsville.
Mussey, R. D. Cincinnati.
McMillen, W. L. Columbus.
McIlvaine, R. R. Cincinnati.
Mendenhall, Geo. Cincinnati.
McMeans, R. R. Sandusky.
Mussey, W. H. Cincinnati.
McGinnie, J. C. Fayetteville.
Malone, H. B. Cincinnati.
Muscroft, C. S. Cincinnati.

Marshal, N. T.	Cincinnati.
Musgrave, H. B.	Cincinnati.
McDermot, C.	Dayton.
Neff, B.	Piqua.
Newberry, J. S.	Cleveland.
Newton, W. S.	Harmar.
Nicholson, W. A.	Cleveland.
*Norton, J. C.	Marion.
Owen, T. C.	Mechanicsburg.
Oliver, J. Q.	Cumminsville.
Paoli, Gerhard	Springfield.
Peck, W. L.	Circleville.
Pence, P.	
Poage, J. G.	Enon.
Price, Joseph	Randolph.
Purple, Jno. G.	Brooklyn.
Potter, J. B.	Canal Winches'r.
Potter, J. F.	Cincinnati.
Pattersen, R. J.	Columbus.
Parker, C. C.	Dayton.
Quinn, J. J.	Cincinnati.
Ramsey, W. H.	Mt. Vernon.
Reeves, W. H.	Deavertown.
Reisinger, J. S.	Gallion.
Rickey, W. W.	Cleveland.
Rigdon, L.	Hamilton.
Rives, Landon C.	Cincinnati.
Rives, Landon	Cincinnati.
Robertson, Chas.	McConnelsville.
Robertson, Jas.	Perrysburg.
Roby, Geo. W.	Bainbridge.
Rodgers, Robt.	Springfield.
Rodman, Thos. S.	Cleveland.
Rogers, J. G.	New Richmond.
Russell, J. W.	Mt. Vernon.
Rukenbrod, S. F.	
Richards, W.	Cincinnati.
Rea, R. L.	Oxford.
Roeker, F.	Cincinnati.
Reese, L. M.	Reading.
Richardson, B. F.	Cincinnati.
Sachse, Geo.	Lancaster.
Sampson, G. W.	McCutcheonville
Sanders, Moses C.	Norwalk.
Sanger, W. W.	New York.
Sayles, J. A.	Ohio City.
Schenck, W. L.	Franklin.
Schrœder, Dan'l.	Ganges.
Scobey, W. H.	Rossville.
Seldon, O. G.	Shanesville.
Seys, Henry H.	Springfield.
Shackelford, R. J.	Medway.
Sharp, W. T.	West Liberty.
Sheldon, B.	Ohio City.
*Shotwell, Jno. T.	Cincinnati.
Silver, D. H.	Milford Centre.
Sisler, William	Manchester.
Skinner, J. S.	Columbus.
Slocum, A. M.	Cincinnati.
Smith, A. C.	Medina C. H.
Smith, C.	Donnelsville.
*Smith. Edmund	Dayton.
Smith, Jas.	New Lexington.
Smith, Jno. A.	Piqua.
Smith, L. J.	Hamilton.
Smith, S. H.	Cincinnati.
Smith, S. M.	Columbus.
Smith, Vespasian	New Carlisle.
Smith, William	Ganges.
Snodgrass, S. B.	Dalton.
St. John, Samuel	Cleveland.
Stanton, Benj.	Salem.
Steele, Henry K.	Dayton.
Sterling, E.	Cleveland.
Sterling, Theodore	Ohio City,
Stevens, E. B.	Lebanon.
Stewart, Solomon	Mansfield.
Stockstill, Jno. N.	New Carlisle.
Storey, R.	Cleveland.
Strong, Nathaniel	Centreville.
Sheets, L. D.	Dayton.
Seward, B. B.	West Liberty.
Sullivan, W. J.	West Middleburg
Tappan, Benj. Jr.	Steubenville.
Taylor, Julius S.	Carrolton, Mont co
Thompson, J. B.	Columbus.
Thompson, J. C.	So. Bloomfield.
Thompson, Matt.	Mt. Vernon.
Thompson, Robt.	Columbus.
Thrall, H. L.	Columbus.
Tilden, Dan'l. Jr.	Cincinnati.
Tipton, R. H.	Darbyville.
Townsend, N. S.	Elyria.
Treon, John	Miamisburg.